



Sadly in the few months since our last issue, we have once again lost some very good mates.

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Our lovely Page 3 girl this issue is Kim Roots and we have lots of old course pics.

See Page 3



What is a Ping? and how do you stop Windows from rebooting your computer.

See Page 4

We have another look at Laverton.

See Page 5





Ted has the latest pension rates, and why don't women have Adam's apples?

See Page 6

Carolyn Wilson tells us her story and 2 Sqn meet and march on Bribie Island.

See Page 7



The 14 Appy (Wagga) blokes and their lovely ladies got together at the Caloundra RSL.

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Allan has another look at the F-35 and checks out the 12 biggest PC myths.

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What was the better, the Spit or the Hurricane?

See Page 10

What spread is better for you, butter or margarine?

See Page 11

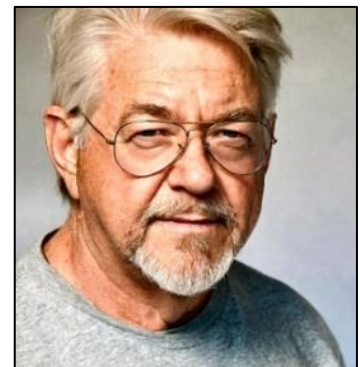


Jeff remembers a flight or two in the reliable old F27.

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Modelling, it ain't what it used to be.

See Page 13







35 Sqn revive their Colours at a wonderful ceremony at Richmond.

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We have a look over HMAS Toowoomba.

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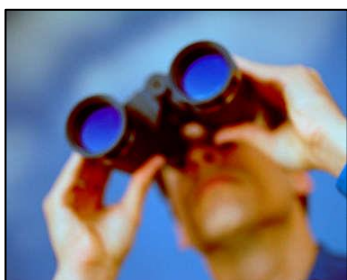


John Laming asks: "Do you believe in Gremlins?"

See Page 16

Sick parade.

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We're looking for a few people, perhaps you can help??

Page 18

This is where you have your say. We look forward to hearing from you.

Page 19



Here's the news, all the news, the whole news and nothing but the news.

Page 20

## Index.

The Index is now finished - all references have been linked so if you're looking for a topic or a photo of someone, click on the [Index](#) link on the top of each page and just follow the links.

## Membership.

Once again, unfortunately, we have to mention costs. Our costs in putting this magazine out are becoming a bit too high to wear, there's travel, in some cases overnight accommodation, stationary, web hosting etc, they all mount up and to date we have met them





willingly as they were quite manageable but sorry to say, we can't any more.

We have had some help through sponsorships and advertising (and for that we are very grateful) and DVA have been wonderful with their grants for our equipment, but that's not enough so we would like to explore the possibility of an annual membership. We think a membership cost of \$12.00 per calendar year (\$1.00 per month) would be adequate. Members would receive a plastic membership card. We've made some enquiries and there are companies out there that are willing to help by offering discounts to our members, on presentation of the card, which could mean you'd save more than the cost of membership.

We'd like your thoughts, please complete the small form below and send it to us – we would love to hear what you have to say. Everything will of course remain confidential.

This does not mean that you will have to join to get the RAM and to have access to all the other stuff, that will still be there and it will still be free. Joining will mean the coffers will have some substance, we can do lots more and you will have a card that could save you money at various shops.

If anyone is agreeable, we would kick it off from 01 January 2016.

Surname: ..... First name:.....

Email address:.....

I Agree/disagree with paying \$12.00 pa for membership.

Remarks:.....

We first ran this last issue and the response was a definite YES – so we'll kick it off next year.

RAM thought for the day.

“Introducing “Lite” – the new way to spell “Light”  
but with 20% fewer letters.  
”

## Reunions.

If you're having a reunion and you would like us to cover it and publish it, let us know and we'll see what can be done.





## Errors

Our aim is to have this site error free – but that's probably impossible. But with your help I reckon we can get pretty close. If you see any errors, be they punctuation, spelling, links that don't work, facts wrong etc, (no matter how small) please let us know so we can fix them.



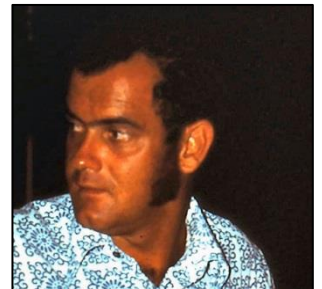
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## IN MEMORY OF

### Dave McDonell.

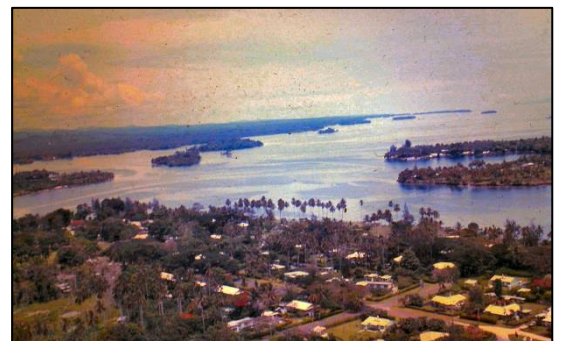
Although not an ex RAAF bloke, Dave, known widely as DCA Dave, was well known to a lot of the RAAF's aviators.



Between the years 1965 to 1972, along with more than 800,000 other young 20 year old men, Dave had to register for National Service. In 1968 his marble was drawn from the barrel and he was conscripted into the Army for 2 years. After his rookies, he was sent to the now closed Balcombe Army Base in Victoria where he was trained in Signals before being posted to 139 Sigs Sqn up to Gallipoli Barracks in Enoggera (Bris).

After discharge from the Army, as he'd been in the Air Cadets while at school, he applied to join the RAAF as aircrew, but an old football injury caused him to fail the medical so he instead joined DCA as a Flight Service officer. We ran into Dave initially back in the middle 1970's when he too was posted to Madang in PNG.

Madang was (and probably still is) a boatman's paradise and not long after arriving, Dave bought a half cabin cruiser with a 135HP Evinrude and became the unofficial welcoming committee for visiting RAAF transport crews. Whenever a Caribou and/or Herc arrived in Madang, Dave would have the crews out on the water enjoying the wonderful harbour with its numerous coral islands and he could often be seen with someone out the back of the boat on skis or over the side with a fishing rod or he would have them on one of the island's beaches enjoying a barby. He was a very generous bloke and never seemed to get ruffled, I knew him for many years and never once saw him angry. During his time in PNG he formed some close and enduring friends among the visiting RAAF blokes.



After PNG, Dave was posted back to Brisbane, then on to Cairns then after DCA, he returned to Brisbane and formed his own photography company and specialised in converting VHS video tapes into digital format.

Some years back Dave was diagnosed with diabetes and in December 2014 he felt that things didn't "feel" quite right so it was off to the doc for a check-up only to be told he had incurable



Pancreatic Cancer. He commenced chemo treatment but found it far too debilitating so to enjoy the short time he knew he had left, he dropped the chemo.

Dave died on the 30<sup>th</sup> June and a ceremony was held for him at the Centenary Memorial Gardens in Sumner (SW Brisbane) on the 8<sup>th</sup> July.



Farewell mate!!

## **Dave Michael Moss.**

John Richards advises that Dave Moss, who was an L Group tailor at various bases and who was very well known by RAAF communicators, passed away on the 1<sup>st</sup> July. He was bestowed an Honorary TELEG many years ago and attended many Comms Reunions. His wife Val found him lying on the floor, by the side of the bed and although an ambulance was called, he couldn't be revived.

Dave had recently spent seven weeks in hospital with pneumonia and other complications and a couple of weeks after release from hospital he developed shingles and was in a lot of pain

His funeral was held on Tuesday the 14th July 2015 in Queanbeyan.



## Ron Furze.

Kevin Kirk advises that Ron Furze, an Electrical Fitter who was on 11 Appy at Wagga (1957-59) died suddenly on Saturday the 11<sup>th</sup> July. After graduation, Ron served at numerous Bases before being commissioned as an Armament Office in 1978.

Ron had been battling cancer for several months and had been living in [Goodwin Village](#) at Ainslie, ACT for some time where had been regularly visited by a bunch of his old mates. He is pictured below after attending an Anzac Day ceremony in 2013.



**Standing L-R:** Charlie Duncan, Garry "Cactus" McCarthy, Kevin Kirk, Col Payne, Geoff "Pedro" Codrington, Roland "Zeke" Perry.

**Seated:** Ron Furze.

Ron's [funeral service](#) was held on Wednesday 15<sup>th</sup> July in Mitchell, ACT.



## **Graeme Monkhouse.**

Dick Tracey advises the passing of Graeme Monkhouse who died early on the 13<sup>th</sup> July. Graeme was on 14 Appy at Wagga (Tulips). Graeme was well known by the Melbourne fraternity as the treasurer of the Melbourne Apprentice Reunion Committee where he served for a considerable number of years. He will be sorely missed.

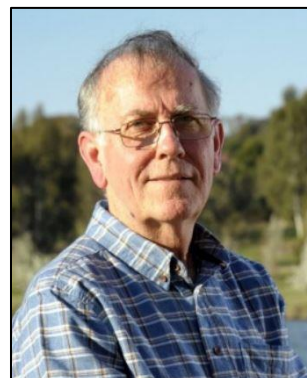
His funeral service was held on Friday the 17<sup>th</sup> July at the Epping RSL

## **Charlie Duncan.**

Kevin Kirk advises that Charlie Duncan, Engine Fitter from the 11th Apprentice Intake, passed away peacefully at the Wesley Hospital in Brisbane on the 15 July. He was diagnosed with a melanoma 12 months ago, but his family did not think it would have this impact so quickly. In accordance with Charlie's wishes, there was a graveside service at the Tallegalla Cemetery, (about 20 klms west of Ipswich) on Monday, 20 July.

## **Eric Traise.**

Laurie Lindsay advises the passing of Eric Traise who died on Monday 13<sup>th</sup> July after a long battle with cancer. Eric joined the RAAF in 1965 as a member of No 11 Engineering Course at Diploma Cadet Squadron. He graduated as a radio officer in 1968. In 2007, after leaving the RAAF and returning to Canberra from Queensland, he joined the Tuggeranong Community Council and served on the council for many years as a general member, treasurer and was elected president in 2013 and, despite his illness, he stood and was re-elected for a second term in September 2014. He also served as chairman of Canberra Airport's Community Aviation Consultative Group.



## **Noel Thompson.**

Ros Ken says; "With all the turmoil going on at the moment, I received the sad news advising that Noel Thompson, Elec Fitter from No 6 (Pansies), passed away in June. Sorry, no further details.



## George Kleinig.

RG Thompson has advised that he spoke to Arlene Kleinig and she informed him that her husband, George Kleinig, had passed away in October 2013. George was on No 6 Telsop Course at Ballarat back in 1955/6 and completed 25 years of service. Arlene said that George had battled Diabetes for 40 years and, towards the end, contracted cancer of the kidneys.

RG said: "I served with George at Frognall after his return from Washington in the 60's. He was a good mate who loved a beer and a good poker game. I am very sorry that we did not receive notification of his passing before today".



## Air Commodore Geoff Michael AO OBE AFC.

Ron Glew advises that Geoff Michael passed away on the 17th July 2015. Air Commodore Michael was a pilot with Bomber Command in WWII; he was the Commanding Officer of 10 Maritime Squadron; Officer Commanding RAAF Base Richmond; President of the RAAF Association NSW and President of the Hawkesbury Shire Council. His funeral was held in Windsor, NSW on Friday the 24<sup>th</sup> of July.



## David "Bushy" Trimble.

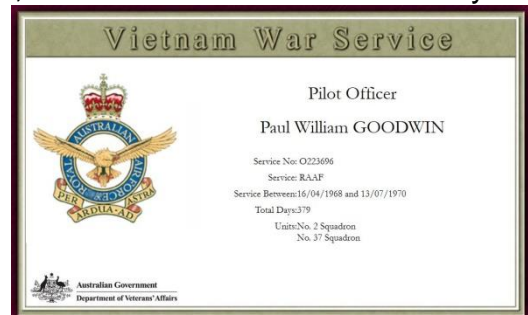
Rob Wilson advises the sad news of the passing of an ex-appy from the 4th Intake 'Dewdrops'. David 'Bushy' Trimble died in Greenslopes Hospital, Brisbane, on Thursday 30th July. His funeral service was held on Tuesday 11 Aug at the Great Southern Memorial Park in CARBROOK.



## Paul William Goodwin, Wing Commander (Ret'd)

We received notice from Arthur Rennick that Paul Goodwin, late of Tura Beach and formerly of Canberra, died on the 8<sup>th</sup> august 2015, aged 69 years. Paul's funeral and RSL service was held in the Clavering Park Crematorium, Wolumla, on Friday, 14 August 2015 at 11:00am.

Paul, who was born in King Island (Tas) in August 1946, was a navigator with 2 Sqn and 37 Sqn and spent from April 1968 to April 1969 in Phan Rang with 2 Sqn then made many return trips with 37 Sqn in the E model Herc in the years 1969 and 1970



## Pauline Bartram.

We received the following from Don Mazlin, he says: "Soon after Bart died ([31<sup>st</sup> May 2013](#)) it became obvious that Pauline Bartram was in the early stages of dementia. The family (especially Carolyn) cared for their mother for as long as practical but last year she was admitted into a nursing home but her mental decline continued. When I last saw her a few months ago I don't think she knew me except maybe when we were leaving. On Tuesday, 25<sup>th</sup> August, she suffered a stroke from which she never recovered.

All who knew Bart and Pauline should regard her passing as a blessing as she was lost without him and her state of mind was a constant concern for their extended family".

## Rick Monk

We have been informed of the passing of Rick Monk who died on Tuesday (8<sup>th</sup> Sept) after a long illness. He was buried in Gympie on Friday the 18<sup>th</sup> sept. Rick was a Teleg and was on [88 Teleg](#) back in 1968.



## Page 3 Girl.

Our lovely Page 3 girl this edition is Kim Roots.







Kim was born and raised in the Fairfield, Villawood area of Sydney, schooled at Villawood primary and Chester Hill high school. Her family were well off and she says she had a wonderful childhood with two older brothers Stephen and Robert. Having two brothers meant life was competitive, there were no “beg pardons” if you wanted something you had to fight for it and this upbringing, which she says she would not change for quids, laid the foundation for her competitive nature. When she was still in primary school her mother enrolled her into ballroom dancing classes and at aged nine she took out the NSW Championship.



She also competed in tennis, netball and athletics but her real passion was for horses. At aged twelve she was given a wild pony, which taught her to really ride and unbeknown to her, her brothers entered her in a Rodeo in the wonderful little town of Bellingen, (inland from Port Macquarie) where she had to ride a Brahma bull. She got the blue ribbon, the brothers got a belting. She continued with horses competing in sporting events and winning more ribbons and just loving life.

But sadly Murphy wasn't far away - there was a cruel turn in her life. She lost her dad to a heart attack when she was fifteen years old and her mum died just fourteen months later succumbing to cancer. Her horse was hit by a car and died and her eldest brother died at the young age of thirty nine, also taken by a heart attack.

From then on she embraced life with both hands. She studied for and obtained a diploma in business studies after which she worked for various Pharmaceutical companies where she met her future husband George Wright and their beautiful daughter Natalie was born in 1979. They were blessed with a beautiful granddaughter, Jade, in 2000 but sadly their marriage lasted only until 1989 then George died unexpectedly in 2003.

In 1998 she met, who she says, was a most amazing man John Boyne, an ex RAAF eleco. John at the time was working for Hawker De Havilland at Bankstown Airport and they have been together ever since. Between them they have six beautiful daughters ranging from forty four to thirty one years old and seven wonderful healthy grandchildren.

She and John live life to the fullest, she says she is so proud to have met many of his friends from both work and his Vietnam veteran friends at the recent 35 Squadron Spartan Colour Parade and function at RAAF base Richmond. She was fascinated by the stories they told and was unaware of the how much they endured during their time in Vietnam.



Kim says she considers herself lucky to have spent 3 wonderful days in the company of these wonderful men and their wives. She and John are looking forward to catching up with everyone again in April 2016.

## 29 RMTA.

**Phil Palmer** sent us these three pics of **29 RMTA** and since then he has remembered some more first names, they are: Mick Powell, Trevor Kay, Barry Lewis.





# THE RAM

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& EX-RAAF PEOPLE & OTHERS



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Relaxing?? In the blocks, at Laverton are  
(L-R: Phil Palmer, Tony Allen, Graham Longton and John Fenwick.

## Weekend Barby?? May 1970.



Laughter is like changing a baby's nappy.  
It doesn't permanently solve any problems,  
but it makes things more acceptable for a while.

## 32 RTC (1966/67)

Bob Mathers sent us this pic. Bob is short two names, can you help??



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**Back Row L-R:** Don't know, Jim McLeary, Phil Clifford, Bob Mietus, Angus McLean, Phil Carne, John Callahan, Liam (Tex) Rossiter.

**Middle Row L-R:** Mark Fielding, Terry Walters, Garry Johnson, Dave Ogg, Bill Joel, Ian Lavender, Bob Mathers, Mick Johnson.

**Front Row L-R:** Don't know, Ian Mckellar, Murray Gill, Kym Priess, Keith Ball, Max Dennis, Garry Mitchell.

A women's lib speaker was addressing a large group and said, "Where would man be today if it were not for woman?" She paused a moment and looked around the room. "I repeat, where would man be today if it were not for woman?" From the back of the room came a voice, "He'd be in the Garden of Eden eating strawberries."





Lynette Svanosio sent us these two Rookies course photos. Unfortunately Lyn doesn't have any first names.

## Course 25/85



**Back Row L-R:** Detering, D Meirs, A Gray, A Shepard, G Maxwell, S Grosser, W Stephson

**Center Row L-R:** C Morris, Murfett, Curtis, K Pepper, N Gray, B Bennet, I. Crapp, D Henderson, D Wilson.

**Front Row L-R:** D Geck, Don't know, Sutcliff, G Campbell, Cpl Lunn, P Coulton, T Kennedy, D Buckingham.





## Course 26/85



**Back Row L-R:** D Jantzen, W MacPherson, L Saul, A Reeves, Lynette Svanosio, H Ransom, L Barker.

**Center Row L-R:** C Fitzpatrick, L Vascolina, T Rodwell, K Palmer, S Westcott, D Menage, T Morris, B Harper

**Front Row L-R:** K Seddon, L Goodwin, Cpl Reimer, C Leslie, P Gray.



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## Townsville Air Show – 1972.







Phil and Sandy Palmer sent us the following pics – A family day with 75 Sqn at Butterworth back in 1974.

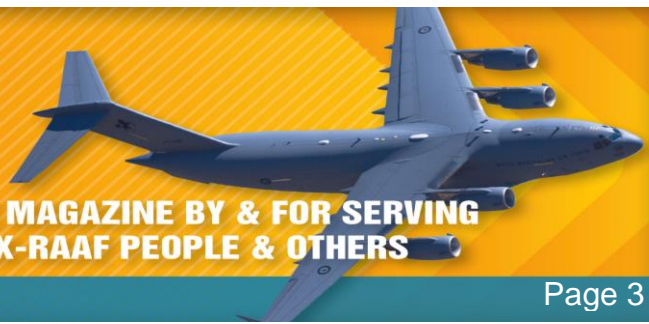


Sandy Palmer with the engine from a Mirage.



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Kay Lennon and Sandy Palmer in the "Whippy Van".



Dog Trials.



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75 Sqn flight line. 1974.



75 Sqn hash house harriers, 1975.



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75 Sqn radio bods, with their bodettes, (and the hot Hilman) at the boatie, 1975



Sandy Palmer, Penang 1970



Phil and Sandy Palmer – today.





Gail Preston spinning records at Radio Butterworth - 1982

## 40 Radio Appy Course.



**Back Row L-R:** K Morris, S Rockliff, P Murphy, P Johnston, M Eno.

**Middle L-R:** D Bown, G Kerkham, J Gardner, C Mason, M Dick.

**Seated L-R:** Meghan Bender, K Weston, S Creanor, B Squires, G Duncan, B Mullin.

Meghan Bender was the RAAF's first female trade apprentice





## 75 Sqn Radio – 1975.



**Back Row L-R:** John Lennon, Ray Farley, Bruce Margetts, Barry “Gibbles” Gilbert, Mick Little, Ray Scovell.

**Third Row L-R:** Ken Morris, Trev Sanderson, Al Goulding, Ken Burt, Barry Willmot, Rod Holloway, Garry “Blue” Humphries, Ted Kroll.

**Second Row L-R:** Peter Stokes, Tony Element, Brian Burgess, John Roundsvel, Tony Harris, Brent “Spook” Villiers, Phil Palmer.

**Front Row L-R:** Paul Wright, Ron Thompson, Pat Baird, Harry Learnihan.

Well, I've finally reached the  
wonder years...

Wonder where my car is  
parked? Wonder where  
I left my phone?  
Wonder where my  
glasses are? Wonder  
what day it is?





## 478 Mntce Sqn - Butterworth. 1984.

Since its formation in 1921, the RAAF has frequently had units based overseas on operational deployments, however only once has the RAAF operated a permanent major air base outside Australia. This was at Butterworth, on the north-west coast of the Malayan peninsula opposite the island of Penang.



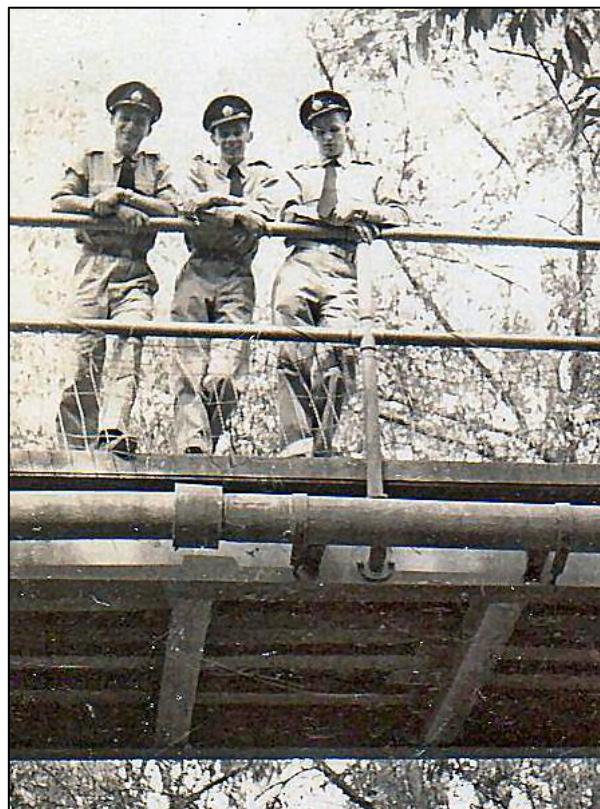
In the mid-1950s Britain, Australia and New Zealand agreed to set up a 'Commonwealth Strategic Reserve' on the Malayan peninsula with the primary aim of countering a growing communist threat across South-East Asia. It was the reserve, rather than the need for additional forces to support 'Emergency' operations, that prompted the British government in 1955 to offer Australia the use of Butterworth. The base was handed over to the RAAF in 1955 on free loan from the British government although it was not formally operational until 1958. No 2 Airfield Construction Squadron (2ACS) (accompanied by 478 Maintenance Squadron) was deployed that year to refurbish facilities and further prepare the base for jet operations. It was not until September that the main body of 2ACS arrived and began work in earnest. Working around the threat of attack by Communist Terrorists, by May 1958 the runway, taxiways, fighter and bomber hardstands were all ready for operational use—a month ahead of schedule.

Click [HERE](#) to read more on Butterworth.





## 478 Radio Section.



Jerry Hemy, Graham Price and George Kleinig at Daylesford in the summer of 1956, visiting from Ballarat. Daylesford, about 45 klms NE of Ballarat, is a spa town located in the foothills of the Great Dividing Range and is about 115 kilometres north-west of Melbourne. First established in 1852 as a gold-mining town, today Daylesford has a population of 2,565 as of the 2011 census.



## Computers and Stuff.

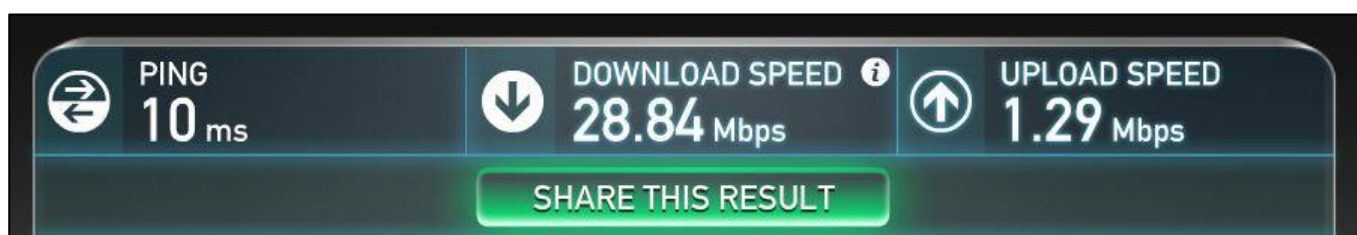
Sam Houliston.

**hbj Highgrove Bathrooms**

This page brought to you with the compliments of Highgrove Trading.  
Designer bathrooms at discount prices.

### Ping.

Most of us have done a check to see what our internet connection speed is (you can do it [HERE](#)). The speed test tells us the download speed, the upload speed and also a ping result – but what is a ping?



Ping is the name of a standard software utility (tool) used to test network connections. The ping 'number' is an indication of the reaction time of your connection, it shows how fast you get a response after you've sent out a request. A fast ping means a more responsive connection, especially in applications where timing is everything (like video games). Ping is measured in milliseconds (ms) – in thousands of a second.

A ping test first determines whether your computer can communicate with another computers over a network and if successful shows the delay between yours and the other computers. You can also use a ping test to troubleshoot connectivity problems with your home network. Microsoft Windows, Mac OS X and Linux contain a built-in ping utility for running ping tests. To execute a ping test using the Windows operating system you:





- Open the command prompt window (the old DOS). You can do this by clicking the start button, (bottom left in your screen), type cmd in the Run or Search window, then press Enter.
- Next to the C:\> prompt, type Ping followed by the web address of the site you wish to test (we've done a test on the Radschool site – see below).

```
C:\>ping radschool.org.au

Pinging radschool.org.au [202.124.241.203] with 32 bytes of data:
Reply from 202.124.241.203: bytes=32 time=74ms TTL=246
Reply from 202.124.241.203: bytes=32 time=29ms TTL=246
Reply from 202.124.241.203: bytes=32 time=31ms TTL=246
Reply from 202.124.241.203: bytes=32 time=39ms TTL=246

Ping statistics for 202.124.241.203:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 29ms, Maximum = 74ms, Average = 43ms

C:\>
```

If you are using an Apple powered machine you:

- Open Network Utility (located inside Applications > Utilities).
- Click Ping.
- Fill out the “Enter the network that you want to ping” field.
- Click Ping.

In either case, if the site is available, Ping will do 4 tests and then show you the minimum and maximum time each test took and will also show you an average. On some computers (particularly those running Linux), the standard ping program does not stop running after four request attempts but instead runs until the user ends it. That is useful for those wanting to monitor the status of a network connection over longer periods of time. In Microsoft Windows, type "ping -t" instead of "ping" at the command line to launch the program in this continuously running mode (and use the Control-C to stop it). The TTL figure (*Time-to-Live*) is a value in an Internet Protocol (IP) packet that tells a network router whether or not the packet has been in the network too long and should be discarded. (Not worth worrying yourself about).

A good broadband Internet connection (wired or wireless) typically results in ping test time of less than 100 ms, often less than 30 ms. A satellite Internet connection is normally quite a bit slower. Interestingly, for a connection to be called “Broadband” it should really have a download

speed of 15 megabits/second, although in a digitally backward country like Australia we often prefer to ignore this.

In late 1996 and early 1997, a flaw in the implementation of networking in some operating systems became well-known and popularized by hackers as a way to crash computers remotely over the Internet. The “Ping of Death” attack was relatively easy to carry out and very dangerous due to its high probability of success. The “Ping of Death” attack involved sending IP packets of a size greater than 65,535 bytes to the target computer. IP packets of this size are illegal, but applications can be built that are capable of creating them. Carefully programmed operating systems could detect and safely handle illegal IP packets, but some failed to do this. Operating system vendors quickly devised patches to avoid the “Ping of Death” and it is no longer a threat on today's computer networks. Still, many Web sites have kept the convention of blocking ping messages at their firewalls to avoid similar denial of service attacks.

The download speed, in the speed test above, is an indication on how fast you can pull data from the server to you. Most connections are designed to download much faster than they upload, since the majority of online activity, like loading web pages or streaming videos, consists of downloads. Download speed is measured in megabits per second (Mbps).

The upload speed is how fast you send data from you to others. Uploading is necessary for sending big files via email, or in using video-chat to talk to someone else online (since you have to send your video feed to them). Upload speed is also measured in megabits per second

Here are the recommended connection speeds for many popular Internet activities. If you are doing multiple things at once online or sharing a connection with multiple computers, then these recommended speeds may not be enough. All speeds are provided in megabits per second (Mbps).

### **Skype**

For voice calls: 0.1 Mbps download / 0.1 Mbps upload  
For video calls: 0.5 Mbps download / 0.5 Mbps upload  
For HD video calls: 1.5 Mbps download / 1.5 Mbps upload



An important note: these connection speed requirements include downloading and uploading at the same time. Since Speedtest.net tests download and upload separately for accuracy, your results will need to be higher than the numbers provided above. For example, your upload speed may be 10 Mbps in the Speedtest.net result, but may go down to 5 Mbps while your connection is downloading something at the same time.

### **Netflix**

Recommended broadband connection speed: 1.5 Mbps download  
For HD quality: 5.0 Mbps download





## YouTube

Recommended: at least 0.5 Mbps download

YouTube offers several quality levels for videos. The lower numbers (360p) indicate that the video is smaller and uses less bandwidth, but is also less detailed. The more detailed the video (480p, 720p, or 1080p), the more bandwidth it takes to stream. Choose the highest video quality that allows you to stream without repeated stops and starts.


## Online Video Games


Recommended: a low ping (less than 100 ms) For playing video games online, download and upload don't matter as much as ping which measures how responsive your connection is. The lower the ping to servers and other players, the less lag you will have in your game. To lower ping, connect your computer to the router using ethernet (a cable) instead of Wi-Fi and avoid downloading/uploading files while playing games.

## History.


As you surf the web, your browser helpfully remembers lots of information for you – sites you've visited, files you've downloaded and more. All of this information is called your history and over time it can clog up and slow down your computer. You can quite easily and harmlessly delete all this information and depending on how long it's been since it was last done, this *could* speed up your computer considerably.

To delete history from your browser you:

**In Firefox:** Click the menu button , choose "History", and then "Clear Recent History". In the "Time range to clean:" select Everything. Click "Details" then select the items you wish to delete

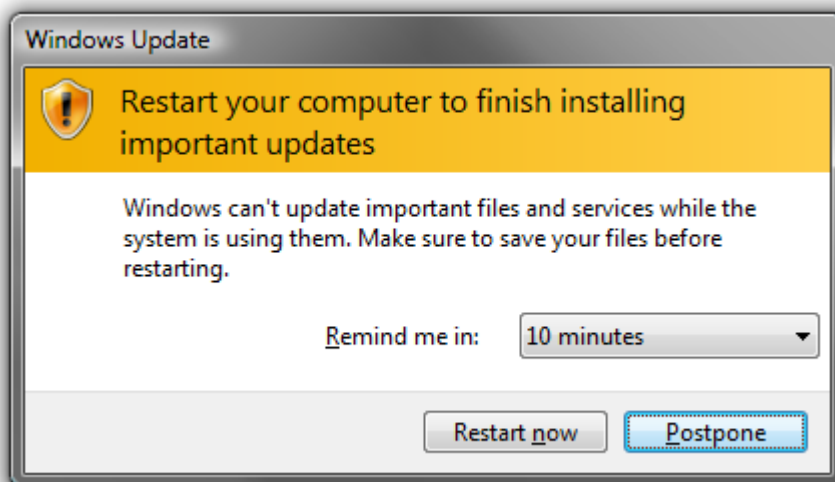
**In IE9 – IE11:** Click the Tools button , click "Safety", then "Delete browsing history". You can select everything except for Preserve Favorites website data and Passwords.

**Safari:** Click the Safari menu, then click "Clear History and Website Data". Select "All History" then click "Clear History".

**Chrome:** Click the menu button , then "History". Click "Clear browsing Data". From the drop down menu click the items you want to delete. Suggest you do not clear Passwords or Autofill form data.

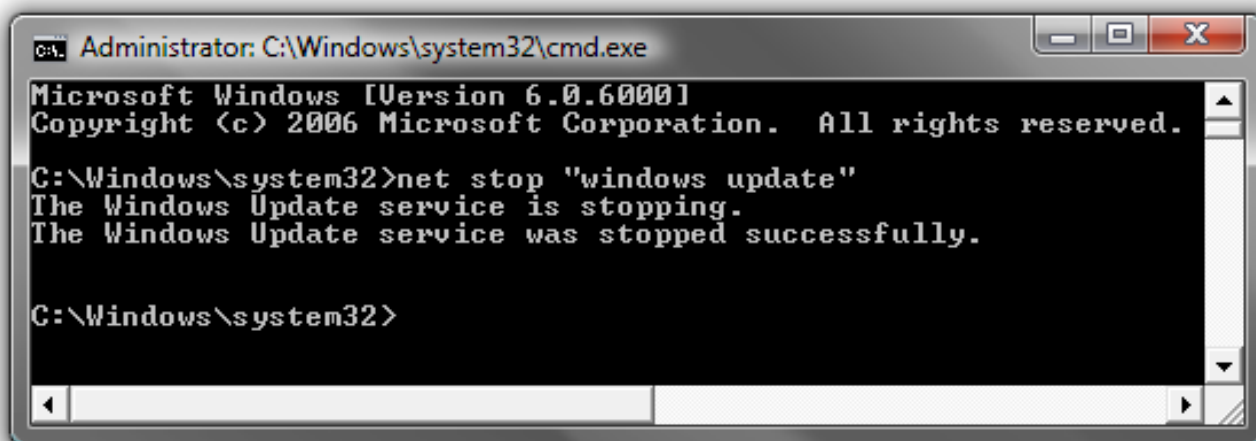
## Prevent Windows Update from forcibly rebooting your Computer.

We've all been at our computer when the Windows Update dialog pops up and tells us to reboot our computer. I've become convinced that this feature has been designed to detect when we are flat out and only pop up at that moment. The real problem comes into play when Windows gets tired of reminding us and says that the computer is going to reboot in 5 minutes, and the only way you can prevent the inevitable is to temporarily disable Windows Update.



You can do this by opening an administrative mode command prompt. Click Start, then "All Programs" then click the "Accessories" directory. Right Click "Command Prompt", then click "Run as Administrator".

When the Dos (Command Prompt) opens, type the following (including the " "): **net stop "windows update"** (see below).





This will stop the Windows Update service, but don't worry, it's only temporary as next time you reboot your Update Service will be active again.

But back to the restart problem. There's a couple of ways that you can disable this behaviour, you'll still get the prompt, but it won't force you to shut down.

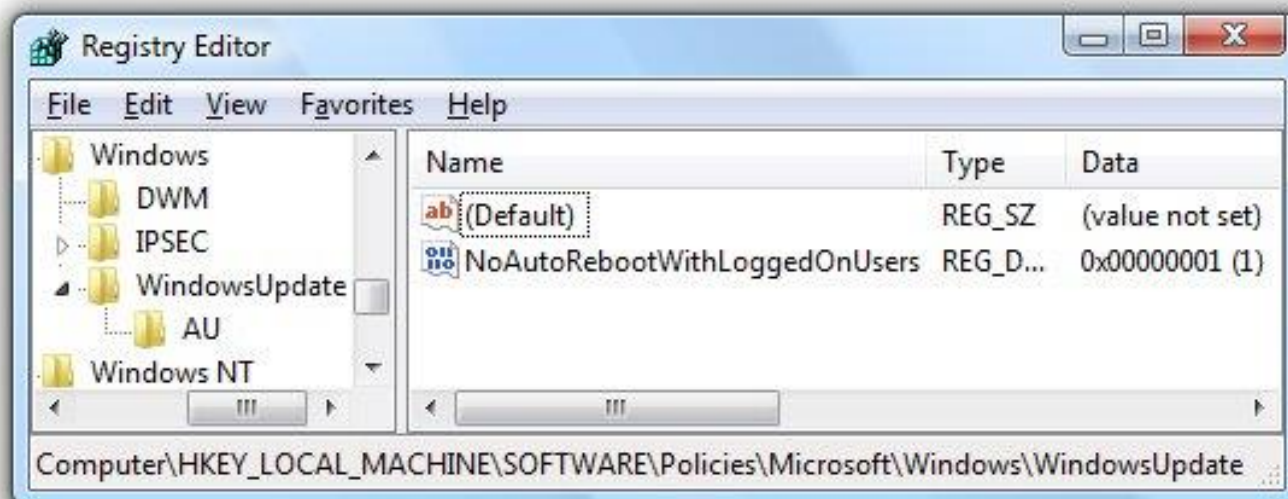
This trick should work for all versions of Windows.

## Manual Registry Hack.

If you're not too smart with computers, don't try this:

Open up regedit.exe through the start menu Search or Run box and navigate down to the following key, creating new keys if they don't exist.

HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Microsoft\Windows\WindowsUpdate\AU



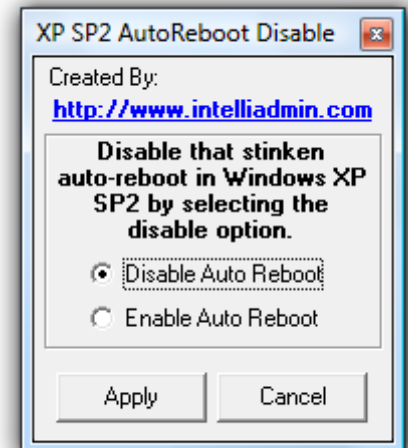
Create a new 32-bit DWORD value named NoAutoRebootWithLoggedOnUsers and give it a value of 1 to prevent automatic reboot while users are logged on. This is a permanent fix, if you want to put things back to the way they were, you will have to drill into the Registry and delete this line.

## Auto version.

If you'd rather not mess with the registry, you can use a small utility created by the people at [Intelliadmin](http://www.intelliadmin.com) which will make the changes for you.

Make sure you're logged onto the internet, then click [HERE](#). If you are using Vista, make sure you right-click it and run it as administrator. This will open a file for you and you will see the window at right. You use the routine to both disable or enable the auto reboot feature.

This works on the Professional editions of XP and all versions of Windows after XP.



Whichever method you use, I would strongly recommend that you NEVER turn off the Automatic Update facility on your computer. You can delay the restart, but always allow Windows to download any and all updates. Every now and then I come across someone who proudly declares that they don't do any of those troublesome updates and privately I think 'what an idiot', but of course I don't say that. From time to time I go into Windows update to see what optional updates are available, often these are updates that make Windows run better, but because there is no security implication they aren't installed by default. Just tick the checkboxes and click Install. The downside of Windows updating-related activity is that it can use a lot of your computer resources at a time when you don't want it to. A great deal of this activity happens in the first half hour after startup, so if you can organise things so that you start your PC half an hour before you want to use it you'll often be ahead.

## Renovating??



With house prices at an all-time low and renovation shows like 'The Block' and 'House Rules' having an overwhelming success, it has never been a better time to look at your own home and assess the rooms that need improvement. The bathroom and laundry used to be very practical areas, that didn't get much attention to the way they looked.

What trends are now showing is that with a combination of clever interior design and affordable bathroom products, a bathroom can be transformed into a sanctuary. Along with the kitchen, the bathroom is now one of the most pivotal rooms when trying to sell a home. Without having





to spend a fortune, a bathroom upgrade can even increase the sale price of your home by about 10%.

Gone are the days of showering over a bath tub while frameless glass showers continue to be one of the most popular items in a modern bathroom. Some people prefer an enclosed frameless shower while others just prefer a singular panel, either way this popular choice looks very clean, sophisticated and opens the bathroom up.



A lot of people ask, do you think I should keep the bath or just have a larger wet area? This is up to personal preference; however we would always recommend keeping at least one bath in the home if space permits. Consider the next 10 years – do you expect to move or sell your



home? Will you have children or elderly people present? Try to think through all options before you make the decision that is best for you. Freestanding baths are still a very popular purchase and are often used as a feature within the room.

An important thing to consider is how much storage space you need. The vanity is one of the biggest decisions as you want it to be highly functional as well as good looking. Wall hung vanities have been the popular choice over recent years although a floor mount vanity will generally have more storage. If you need excess storage then have a think about integrating a mirrored cabinet or having a side cabinet in the room too.



The mood of a bathroom is set with the choice of tile. The modern bathroom opts for floor to ceiling tiles so it is more crucial than ever, to choose wisely. The monochrome palette has been a popular choice of those who take a particular interest in the recent renovation shows. Some prefer a warmer style and opt for natural looking, stone coloured tiles. Feature walls are also very popular and the possibilities are endless but we are seeing a lot of exposed brick, textured tiles to add depth.





A lot of people find it overwhelming thinking about renovating their bathroom. The process starts to flow with your initial research. There are a huge amount of resources online to get a feel for the style you would like to achieve or alternatively there is still a wide range of magazines on the market.

Once you have an idea of the style, you have to think practically. Measure the area and take note of where the plumbing is currently. Think about the current area – does the layout work for you? What would you like to change and what do you think should stay the same?

Now is the time to start looking at product, bearing in mind the style and space constraints. At this stage, we would suggest to visit your local Highgrove Bathrooms store to start making your ideas, a reality. Our friendly sales people will be able to consider your personal taste and room measurements to help you pick out some products from our wide range in store.



It is important in this day and age to realise that cheaper doesn't necessarily mean inferior quality. Highgrove Bathrooms pride ourselves in offering great looking, high quality products at an affordable rate. We can do this as we import the product ourselves, cutting out the middle

man and selling directly to the public via our 25 stores Australia-wide. This, along with our friendly customer service and product on hand, is why Highgrove Bathrooms is the fastest growing bathroom company to date.

Providing quality bathroom products since 2004, Highgrove Bathrooms have just celebrated our 10<sup>th</sup> Birthday in the industry. We have strived to be at the forefront of bathroom design by closely watching the current and future bathroom trends over the duration.

## 15% discount.

Being an Australian owned company, the business owners would like to pass on a price discount to all ADF personnel who hold a DVA Health-care Card (either Orange, White or Gold) as a token of their appreciation for the dedication and service to Australia provided by these ADF personnel. As such, the owners hereby offer the gift of a 15% discount off retail prices to all DVA Health Card holders (and their families) on any product, in any Highgrove Bathrooms' store. This offer is value until 31 December 2015.

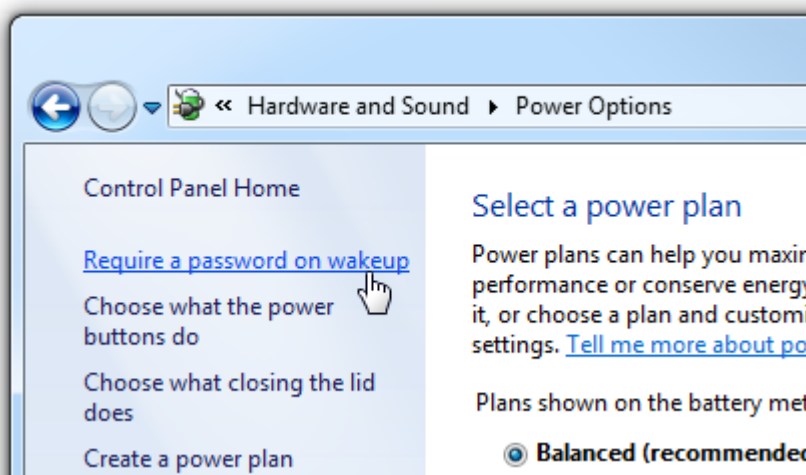
To receive 15% discount, please present your DVA health card when you purchase/order any item. Click [HERE](#) for the store closest to you

## NBN

The NBN is coming, it is being laid out across Australia and a few areas have it already. If you haven't and would like to know when it will pass your front door, click [HERE](#).

## Make Windows 7 or 8 Not Require a Password on WakeUp.

By default, after your computer has been to sleep, Windows 7 and/or Windows 8 requires you to enter your password on wake-up. This can be very annoying but luckily, you can fix this.





Here's how!!

Open your Control Panel, then head for Power Options. Click "Require a password on wakeup" on the left-hand side.

The Password settings will be greyed out, so first you will need to click the "Change settings that are currently unavailable" link...see below.

This removes the Grey area so now you can click the "Don't require a password" button then make sure you click "Save changes" (see right).

Next time you reboot you won't have to re-enter your password when your computer wakes up.



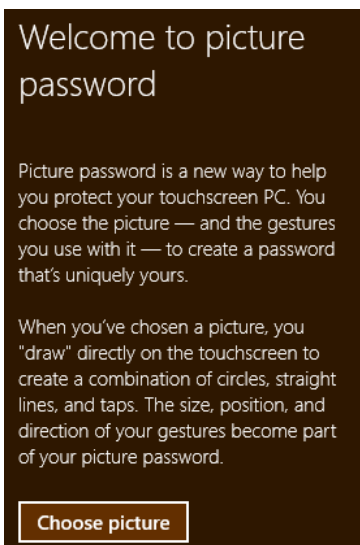
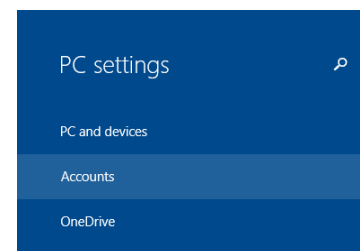
## Windows 8/8.1

If you have a laptop with a touch screen, and you're running Windows 8/8.1, you can change your log-in password from one you have to type in, to a "symbol" drawn on your screen.

Here's how:

Open Windows 8 and click on or touch (click) PC Settings. In the blue window on the left hand side, click "Accounts", then click "Sign-In Options". Under **Picture Password**, click "ADD". Enter your account password then the window at right will appear, click "Choose Picture" and browse through your pictures library for an image that you like.

Select your chosen image and click or tap "Open" to enlarge it on screen. Click or tap and drag it around the viewable window until you like the framing and click or tap "Use this picture."



Complete a series of three gestures over your chosen image to form an unlock sequence. You can use a combination of lines, circles or taps anywhere on the image. Either click or tap and drag to create lines and circles or use your finger on a touch screen. Make sure you remember the gestures you use, their placement on the image and their order of completion. Complete the series of gestures again to prove you remember them and you're all set. If you messed up, don't panic. Just hit "Start over."

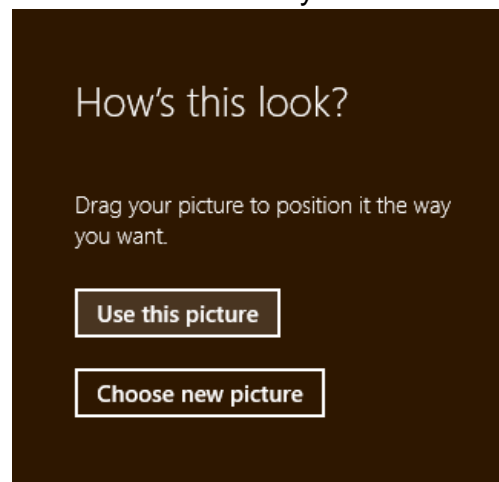
Click or tap "Finish" to return to PC Settings once you've successfully completed the procedure.

### How to Create a PIN

If you would rather use a pin to open your computer, just like on an ATM, as long as you have Windows 8/8.1 you can quite easily.

Open PC Settings as described above. Click "Accounts", then click "Sign-In Options" then under **PIN**, click "ADD". Enter your account password when prompted then enter your chosen four-digit number in both of the provided fields and click or tap "Finish."

That's all there is to it.



The man said "My girlfriend is such a cheat and a liar.  
I've been going with her almost a year now, and I never would have known she was married  
until my wife mentioned it just the other day."

## How to Enable Delete Confirmation Dialog Box in Windows 8 and Later?

When Windows 8 was under development, Microsoft disabled the delete confirmation dialog box, that's the little bit that pops up and asks you if you really want to delete a file after you've hit the Delete button. If you're like most people and still using Windows 7 you wouldn't have

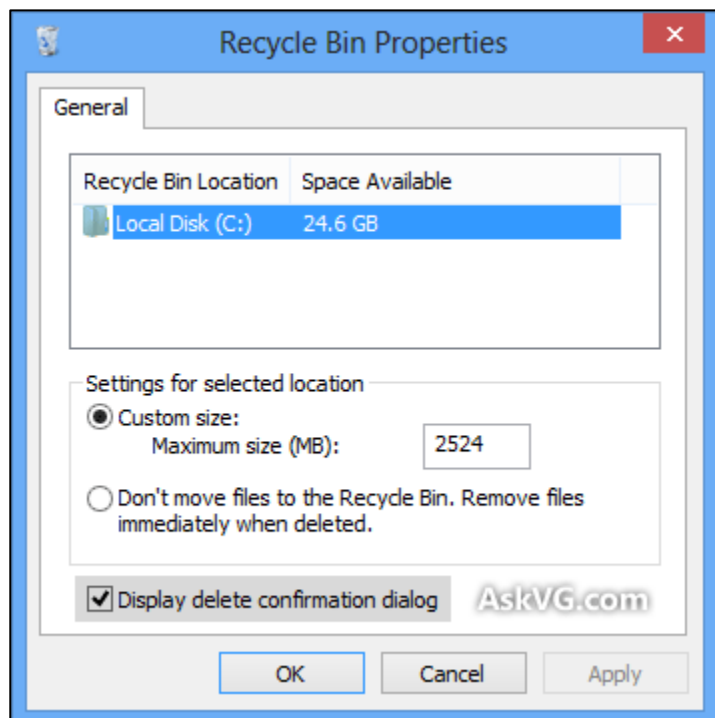


noticed it, but now that Microsoft has offered everyone Windows 10 for free, when you upgrade you will get a shock as the minute you hit the Delete button the folder/photo/movie/song is gone, well, it's not really gone, it's just in the Recycle Bin and if you want it back you just restore it. A lot of people screamed about this so Microsoft has relented and if you want that facility back here's how you do it. (This works in Windows 8 too).

1. Right-click on the Recycle Bin icon on Desktop and select Properties.
2. Now enable "Display delete confirmation dialog" option and apply the changes.
3. That's it. It'll re-enable the confirmation dialog box and now Windows will always ask for your confirmation before moving a file or folder to Recycle Bin.

You might find that the "Display delete confirmation dialog" is greyed out, in other words, the option is disabled and can't be enabled. If this happens to you, you can enable or disable this option as below:

1. Press "WIN+R" key combination to launch RUN dialog box, then type **gpedit.msc** and press Enter. It'll open Group Policy Editor.
2. In the left hand window, go to: User Configuration > Administrative Templates > Windows Components > Windows Explorer / File Explorer.
3. In right-side window, double-click on "Display confirmation dialog when deleting files" option and set its value to "Enabled".



You can also do it using the Registry Editor (but only if you know what you're doing!!)

1. Type regedit in RUN dialog box and press Enter. It'll open Registry Editor.
2. Now go to following key:  
HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\Policies\Explorer
3. In right-side window, create a new DWORD ConfirmFileDelete and set its value to 1 to enable confirmation dialog box or set it to 0 to disable confirmation dialog box.

Simple, wasn't it?



## Pensions.

The following email is doing the rounds, supposedly from someone called John Glover

"We sat in the sun at Coffs Harbour CBD mall last Thursday having a coffee before browsing the now weekly fresh food growers market. The number of well dressed African couples with children were enjoying the same atmosphere. I needed to walk over to the Palm Centre chemist to get Shirley one of her prescriptions. I stood 3rd in one line of a four abreast line with others waiting to be served, it was truly a spot the Aussie group, just me and two others. When the well dressed tall African man in front of me handed over his prescription it was promptly filled. The shop assistant advised the man that it cost \$32.20. He looked at her in surprise and said "but we don't pay".



After the attendant asked for evidence of why and the man pulled out two reasons, the first was his families Australia Residency Card, the second was his personal Federal Government Pensioner card. The attendant took both back to the owner/chemist, I stood there watching the chemist make a call. A few minutes later the attendant returned and told the man the cost was reduced to \$9.40, his response was "but we don't pay", to which the attendant said but this prescription is not made out to you, it's made out to your wife.

The man then went into a "but she not speak with you". By now myself and others behind me were getting impatient. Then the man pulled out his MasterCard and paid the \$9.40 for what would have cost this wood duck \$32.20 had it been mine. This man was early 30's, 6' tall, well dressed in a suit - yet he had an Australia Pension Card that neither myself or Shirley will ever qualify for. Whilst Australia may one day gain from the guy's adult aged children, they too will cost all tax payers on top of their parents until they finish school, are funded through university, and maybe one day get a tax paying job. The above is a real life and true account of a single event that unfolded on just one sunny Thursday in my home town."

John Glover then includes a copy of a letter sent to a supposed Robert Bretton, from the Australian Government, showing that Refugees living in Australia receive allowances equal to \$56,680 per year, when the poor old Pensioner only receives \$16,068 per year.

Are you aware of the following?

Robert Bretton  
The Australian Federal Government provides the following financial assistance:-

BENEFIT	AUSTRALIAN AGED PENSIONER	ILLEGAL IMMIGRANTS/REFUGEES LIVING IN AUSTRALIA
Weekly allowance	\$253.00	\$472.50
Weekly Spouse allowance	\$56.00	\$472.50
Additional weekly hardship allowance	\$0.00	\$145.00
<b>TOTAL YEARLY BENEFIT</b>	<b>\$16,068.00</b>	<b>\$56,680.00</b>

If you believe it, you'll believe anything, IT'S ALL CRAP!!!



These rubbish emails pop up regularly and anyone with just a tiny amount of effort can Google Illegal Immigrants Pensions and find notices from [The Australian Government](#), the [Refugee Council of Australia](#) and even [Hoax Slayer](#) debunking the whole thing but still people send it on as if it's genuine.

Don't be suckered in, a refugee who has permanent residency in Australia receives exactly the same social security benefit as any Australian-born person in the same circumstances. Refugees apply for social security through Centrelink like everyone else and are assessed for the different payment options in the same way as everyone else. There are no separate Centrelink allowances that one can receive simply by virtue of being a refugee, nor do refugees receive cash payments under either the Integrated Humanitarian Settlement Strategy (IHSS) or the Settlement Grants Program.

If you receive one of these hoax emails, junk it and inform the person who forwarded the email that it's all garbage.

## Another look at RAAF Williams – Laverton.



Sadly, just a shell of its former self, RAAF Williams-Laverton has significant heritage values for its role in the assemblage, testing and maintenance of RAAF aircraft from its inception in 1924 until the present.

The RAAF base at Laverton was set up to maintain and repair aircraft and keep them airworthy. Virtually every aircraft accepted into the RAAF from the original Imperial gift at the end of WWI, arrived in Australia in the form of component parts, which were transferred to Laverton for construction. Having been built there, these aircraft were almost always test-flown from Laverton. During WWII the role of the base in supplying aircraft for Australian airmen was fundamental to the war effort of the RAAF. Virtually every type of aircraft in service during World War II was serviced at Laverton, including the first Spitfires to arrive in Australia.





After the war, Laverton continued to be important as a testing ground for new aircraft. The first jet aircraft to be flown in Australia was tested at Laverton. Laverton was also the site of the test flight of the Vampire A78-1 and first Australian-built jet aircraft. The first helicopter to enter Australian service was assembled and flown at Laverton in January 1949.

The first aircraft hangars at Laverton were constructed in 1926-1928 for the No. 1 Aircraft Depot (No.1 AD) with further expansion carried out when 21 Squadron moved to the base in 1936. The depot went on to play an important part of supporting Australia's involvement in World War II, with thousands of aircraft assembled and tested at Laverton, while many others were repaired or modified following mechanical failure or damage sustained in battle.



Reflecting its role in the construction and maintenance of these aircraft, it retains its No.1 AD Headquarters and administration complex built in the 1930s together with workshops and hangars built during the 1920s and 30s, and its complex of three 1930's workshops and hangars next to the tarmac

Early in the 20th century Britain realised the importance of aviation to its defence needs and expanded the existing Balloon Section of its Royal Engineers into an Air Battalion. Later that year the formation of a 'corps of aviators' and the establishment of 'a school of practical navigation' were recommended. The result of this was the formation in April 1912 of the Royal Flying Corps (RFC). The Royal Flying Corps comprised both naval and military wings and a



Central Flying School. The logistical and other arrangements employed at the Central Flying School and other British air bases were to be influential in the later development of Australian military aviation bases.

In 1909 the Australian Government gave recognition to the potential of military aviation by offering £5,000 to the inventor or designer of an aeroplane suitable for military flying. Although none of the forty entries were judged good enough for use in a wartime situation, the competition attracted a high degree of interest in the military application of 'flying machines', and the Government was lobbied for the formation of a flying corps. By the beginning of 1912 the Army had proceeded with its plans for a flying school, having advertised in December 1911 for the appointment of two competent mechanics and aviators. The Government publicly announced the formation of the Central Flying School and Aviation Corps (commonly referred to as the Australian Flying Corps, or AFC) on 7 March 1913. The original plan was for the Australian Central Flying School to be located in the nation's new capital, Canberra, but after surveying the Canberra site, it was rejected on the grounds that it was too high, the area too isolated, and the surrounding hills too dangerous for safe flying.

Subsequent investigations showed that the Western District of Victoria was much more suitable for the establishment of the new flying school, with the best sites being at the Werribee Plains and at Altona Bay. Eventually, some 734 acres of grazing land was purchased at Point Cook near Werribee at a cost of about £6,000 (\$12,000). The purchase of the land was finalised on 13 December 1913 and the first training course at Point Cook began in August 1914.

Despite the recent date of the AFC's establishment and that of the Central Flying School, many Australian pilots trained at Point Cook during World War I and saw air action during the conflict. In November 1914 a request came from the Indian Government for aerial assistance in a planned campaign in Turkish-occupied Mesopotamia (now Iraq). In response, the Australian Government despatched four officers and 41 other ranks, who officially served as flying officers in the British Royal Flying Corps. Australian military aviators saw their first action in one of the more disastrous campaigns of World War I. They were ill-equipped for the conditions in the Middle East and many fell prey to disease, particularly malaria. George P Merz, one of the first four pilots to graduate from Point Cook, was killed during the Mesopotamian campaign - the first Australian airman to die in battle.





Though many Australian pilots in this and other campaigns served directly as officers of the British Royal Flying Corps, others actually flew under the auspices of the Australian Flying Corps. At the end of 1915 the British Army Council in London made the suggestion that the Australian Government might prefer to raise complete squadrons which would serve with the British forces but under the name of the 'Australian Flying Corps' (AFC). The Australian Government agreed and by 1916 the AFC had expanded to four front-line squadrons. By the end of 1917 the AFC had also established a training wing of four squadrons based in Gloucester, England. It is believed that 460 officers and 2,234 other ranks served with the AFC and another 200 pilots and observers flew with other services (mainly the RFC) during the 1914-18 War. Australia was unique in that it was able to maintain a distinct identity through the establishment of the AFC squadrons and even though they were often given RFC designations, their identity as Australian squadrons was retained. This proved to be significant in enabling Australia to move toward the establishment of a regular air force in the years following the cessation of hostilities.



Other flight and flight training facilities were established elsewhere in Australia during World War I. In 1916 the New South Wales Government announced its intention to establish a State Aviation School at Richmond outside Sydney. The school was originally placed under the control of the New South Wales Department of Works, but was later transferred to the New South Wales Department of Education. The courses at Richmond were modelled on those begun at Point Cook, however, most of the Richmond trained pilots who flew in World War I did not serve with the AFC, but enlisted directly with the British RFC.



In April 1918 both the Army and Navy wings of the British Flying Services - known respectively as the Royal Flying Corps and the Royal Naval Air Service - were amalgamated to form an independent flying service - the Royal Air Force. Not long afterwards moves began in Australia to effect similar changes to its fledgling air service. The prime mover behind the efforts in the immediate post-war period towards the establishment of a single Australian air force is generally considered to have been Lieutenant-Colonel (later Air Vice-Marshal, Sir) Richard Williams. Williams had commanded No. 1 Squadron AFC during the war and was then promoted to the rank of Lieutenant-Colonel in June 1918 and given the command of the 40th wing of the British Royal Air Force.



The Australian Air Force was officially inaugurated on 31 March 1921 and approval to use the 'Royal' prefix was granted on 13 August 1921. Under the initial scheme for the Air Force, there were to be seven squadrons. The first four of these were to be located at Point Cook, with two squadrons at Richmond in New South Wales and a seaplane unit based at a site on Sydney Harbour however, the battle to increase the strength of the RAAF through the 1920s and 1930s was a continual one. Overall defence spending continued to be low through the 1920s, and the RAAF still had to compete with the two longer established services, the Army and the Navy, both of which received much higher levels of funding support from the Defence Department up until the outbreak of World War II. To mid-1924 the flying personnel in the RAAF only consisted of about 50 officers and 300 other ranks yet despite this, the 1920s saw the expansion of the RAAF, which established two new bases at Laverton and at Richmond, and also invested considerable capital on the expansion of existing facilities at Point Cook.

At the end of World War I, Australia received a gift of aircraft equipment from the British Government which consisted of 128 aeroplanes of varied descriptions, together with mechanical transport, engines, stores, workshop machinery, tools and spare parts – all valued at £1,000,000 (\$2,000,000). Following arrival in Victoria this equipment was stored in various locations under less than satisfactory circumstances. By 1921 stores sections operated at both Spotswood and North Fitzroy. At Spotswood, for example, equipment was stored in wheat-sheds rented from the Victorian Railways, while at North Fitzroy vacant brewery buildings housed the motor repair section. This was the nucleus of No. 1 Aircraft Depot (1 AD), which was formally created as a unit based at Point Cook on 1 July 1921 but by 1922 it was clear that considerable provision needed to be made for 1 AD in the form of an entire depot complex. Although Point Cook was initially favoured as the permanent site of 1 AD there were a number of disadvantages, not the least of which was the estimated £45 000 (\$90,000) cost of building a



railway spur to the site. Additionally, it was felt that the proximity of Point Cook to Port Phillip Bay and the consequent salt air, would cause machinery to deteriorate. The Commonwealth Parliamentary Committee investigating possible options eventually settled on Laverton, which was already on both the main Melbourne to Geelong railway and road and already had telephone, water, light and power mains running through it. As a result, a detailed plan for the establishment of the new depot at Laverton was prepared under Chief Architect John Smith Murdoch by the Commonwealth Department of Works and Railways. This department was responsible for the design of buildings at all Defence Department establishments, which accounts for the similarity of certain building types at different air, naval and military bases constructed during this period.

The proposal at Laverton was to construct the complex of buildings over a period of four years. The complex was to comprise stores, workshops, hangars, and living quarters for officers and men, as well as landing grounds for machines. Buildings which were to house the working functions of the depot (the storage buildings, workshops, salvage store, boiler room, etc, and the hangars) were all designed of brick, while buildings for the accommodation and recreation of the residents were all designed in timber. By November 1924 a start had been made on the construction of a special railway siding adjacent to the site, preparatory to transporting materials and equipment on site. By the following January work had commenced on the construction of the first buildings, and within a year at least some of the buildings were available for occupation. It was not until 1 March 1926, however, that the official relocation of 1 AD from Point Cook to Laverton took place.



As originally planned and constructed, the depot at Laverton was arranged in a formal manner, and was laid out in four basic areas. These were: the storage and workshop buildings; the No.1 Aircraft Depot barracks and mess facilities; officer's quarters; and finally, the hangars,



temporary huts and mess facilities of the Service Squadron which was to be based at Laverton alongside 1 AD. The workshop and store buildings were located along the Melbourne-Geelong railway line, to which they were connected by a moveable crane. The depot barracks and mess facilities were located some distance to the east of these. The officer's quarters and the Service Squadron hangars, huts, and mess were strung out to the north of these, along the east side of Tangmere Road. To the north again was the intersection of the Melbourne to Geelong road and the Point Cook Road.

The main role of the RAAF establishment at Laverton was as a stores depot. Virtually every aircraft accepted into the RAAF after 1926 arrived in Australia in the form of component parts, which were transported to Laverton for assembly. The range of aircraft built at Laverton from imported parts in this manner included Wapitis, Bulldogs, Demons and Avro Ansons and they were almost always test-flown from Laverton.

Within a matter of years Laverton's sole purpose as a stores depot changed dramatically with the transfer of 1 Squadron from Point Cook to Laverton in 1928, it was however, to be a further eight years before Laverton assumed the status of a station with a separate headquarters, following the formation of 21 Squadron in 1936.



More significant for the Air Force was its involvement in the survey of air routes in isolated areas of the nation. The Air Force was involved in the survey of strategic air routes around Australia, and the identification of suitable landing-places along them. RAAF work on possible mail routes was part of a general expectation on the part of the Australian Government that the Air Force would assist in the achievement of its civil aviation objectives. The Government's attitude was that it was important to maintain, encourage and assist in the development of civil aviation, since the nation was not in the economic position of being able to maintain a large air service in peacetime. This attitude was manifested by the formation in 1920 of a Civil Aviation Branch within the Defence Department. In the late 1920s, Laverton operated outside its original function when, along with Point Cook and Richmond, it became involved in a number of RAAF exercises which were designed to provide assistance to the Australian Government in a number of its exploration initiatives. Two major areas of the RAAF's civil work were in survey

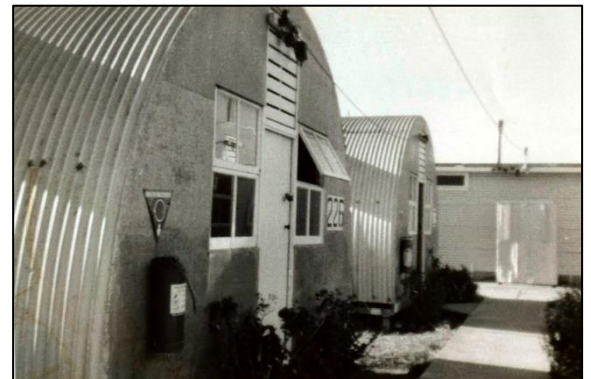


undertakings, many of which were in previously unsurveyed areas of central and northern Australia, and in meteorological flights for weather forecasting.

Laverton was also the starting point for some of the RAAF's more impressive 'epic' flights. One of the best-known took place in February 1938, when Richard Williams was delegated to represent Australia at the opening of the newly completed floating dock at the British naval base in Singapore. The civil air service to Singapore at this time ran only once a week, and so Williams was forced to make the return trip in a service aircraft. The trip acquired more significance than it would otherwise have had because of the choice of aircraft in which Williams chose to make the journey - a twin engine monoplane, the Australian designed Wackett Gannet. This meant that the trip represented the first time an aircraft designed and built in Australia (by the Commonwealth Aircraft Corporation) had completed an international flight.



Concurrent with the expansion of the range of RAAF activities based at Laverton, was a large increase in personnel stationed there and by July 1935 the number of personnel at Laverton had increased significantly. By this time the training facilities at the base had been increased to the stage where, in addition to drill training for recruits, trade training for Aero Fitters, Metal Riggers, Armour Fitters and W/T Operators was commenced. The influx of new recruits resulted in March 1935 in the discontinuation of the system of posting newly enlisted airmen direct to units for training. A Recruit Training Section was formed as part of 1 AD, and on 1 September 1936 this section became Recruit Training Squadron. The presence of this training depot at Laverton, in addition to the base's role in receiving and testing aircraft delivered to the Air Force, made the Base the logical point at which to initiate new flying units. Major capital works expenditure at Laverton, Point Cook and Richmond during the mid to late 1930s reflected the Australian Government's commitment to the expansion of Air Force facilities in this period and its focus on air power as being crucial to the Allied cause in the impending military conflict.



In addition to Point Cook and Laverton, RAAF bases were established elsewhere around the country in the lead up to World War II: Richmond, New South Wales (1923); Pearce, Western Australia (1934); Darwin, Northern Territory; with Archerfield, Queensland; and Rathmines, New South Wales (1939) and during this period nine Permanent Air Force Squadrons: No's 2, 3, 4, 5, 8, 10, 11, 12, and 14, and four Citizen's Air Force Squadrons: No's 21, 22, 23 and 25 were either raised or re-raised, however, in most cases they were under strength and the RAAF was ill prepared for war when it was declared in 1939.





On the eve of World War II the following air units were stationed at Laverton: No.1 (Bomber) Squadron; No.2 (General Reconnaissance) Squadron; No.21 (General Purpose) Squadron; and one flight of No.12 (General Purpose) Squadron.

Following the outbreak of hostilities the Allies realised that air strike capacity would be of paramount importance in the War. Britain quickly instituted the Empire Air Training Scheme (EATS), whereby Australia, New Zealand, and Canada (and later Southern Rhodesia) would supply trained aircrew for Britain. With the implementation of EATS, Point Cook's Central Flying School lost its singular centralised training role. As a result, a scheme was devised whereby twenty 'Elementary and Service Flying Training Schools' as well as other training units and schools for Air Observers, Wireless Air Gunners, and in Bombing and Air Navigation were established throughout Australia. These schools were accommodated in prefabricated buildings, which were in the main constructed at Laverton and transported to their destinations where they were then reassembled.



In addition, the Air Performance Unit, which had been formed at Point Cook to work in the area of research and development, was transferred to Laverton where it became known as Aircraft Research and Development Unit (ARDU).



During World War II Laverton was greatly expanded and the Base's population was at its peak. The first 34 Australians graduated from RAAF Service Flying Training Schools on 18 November 1940, with a further 37 000 aircrew eventually trained in Australia. To meet this commitment, the RAAF established 2 Air Navigation Schools, 3 Air Observers Schools, 3 Bombing and Gunnery Schools, 12 Elementary Flying Training Schools, 6 Initial Flying Training Schools and 8 Service Flying Training Schools. In addition, 7 Schools of Technical Training and other specialised technical schools were established to train ground crews in the maintenance of aircraft and equipment.

The duration of World War II saw 15,746 RAAF pilots, navigators, wireless operators, gunners and engineers sent to British squadrons and 11,641 to Australian squadrons. When the armistice with Japan was signed on 15 August 1945, the RAAF had a total of 131,622 men and women working in 570 Units around the globe, maintaining 5,620 flying aircraft. The list of aircraft was divided equally into front-line and support machines which included Liberators, Mosquitoes, Mustangs, Dakotas, Catalinas, Beaufighters, Kittyhawks and Spitfires – war had transformed the RAAF into an immensely powerful force.



AUSTRALIAN WAR MEMORIAL

P10504.005

In addition to its execution of numerous air operations, the RAAF had also pioneered the development and operation of radar and operated its own shipping in the South West Pacific Area. The RAAF had grown to be the world's fourth largest air force.

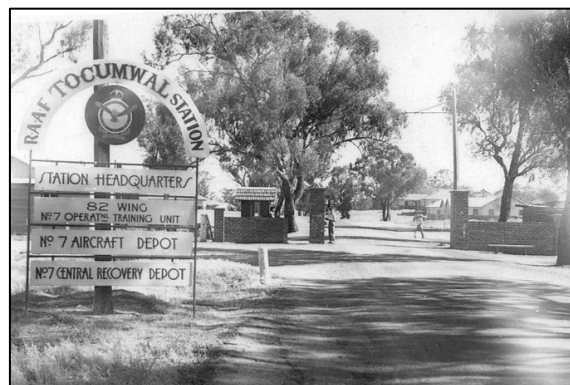


Virtually every type of aircraft in service during World War II was serviced at Laverton. These aircraft ranged from small training aircraft to multi-engine bombers and among the more dramatic efforts at Laverton during the war was Operation 'Capotan'. This operation saw the components of the first Spitfires to arrive in Australia rushed from the Melbourne docks and assembled and test flown at Laverton, from where they were issued to RAAF and RAF Squadrons for operational deployment in the north of Australia.



On the civil aviation front, Trans-Australia Airways (TAA) commenced its first commercial operations at Laverton in September 1946 and continued to operate out of the RAAF base until Essendon Airport was completed.

The training operations which had begun at Laverton just before the outbreak of World War II also continued after the end of the war. Many thousands of RAAF personnel have been trained at Laverton since then, including: all Radio and Communications personnel; medical orderlies; WRAAF members; all 21 Squadron National Service reservists; Air Training Corps; Musicians; and Publication Assistants. Laverton was also responsible for the administration and control of the Tocumwal base in the post-war period, which was used for the disposal of obsolete aircraft.



Laverton also continued to play an important part in RAAF official ceremonial activities in the post-war period, and in this it was arguably more important than Point Cook. In September 1952 the first RAAF colours were presented at Laverton and in 1954 Her Majesty Queen Elizabeth II visited the base as part of her first tour of the Commonwealth.

After the war the airfield continued to be a testing ground for new aircraft, remaining in this role until Avalon Airport began to take over in the early 1960s. Flight operations officially ceased at Laverton in September 1996, with the last aircraft departing in February 1998: a de Havilland Vampire jet from the RAAF museum fleet. On closure RAAF Williams was divided into two: the eastern side remained a military base, while the empty airfield was sold to a private developer for housing.

As for the aircraft hangars, in 2009 they were retained by the RAAF and added to the Commonwealth Heritage List as a Listed Place.





The west workshops, (below) include a large collection of buildings once used by 1 AD. Most noticeable in this block is a pair of large brick hangars, but three prefabricated metal hangars also occupy the precinct, along with a half-dozen brick warehouses and smaller office blocks.



As for the once busy runways themselves, today a little over half remains, the southern portion of runway 35, the eastern leg of runway 23, and the northern stub of runway 17. No long stretches of pavement remain – the runways having been used as a dumping ground for spoil or dug up during the laying of pipes – so no testing your car on the 1/4 mile.



Progress??



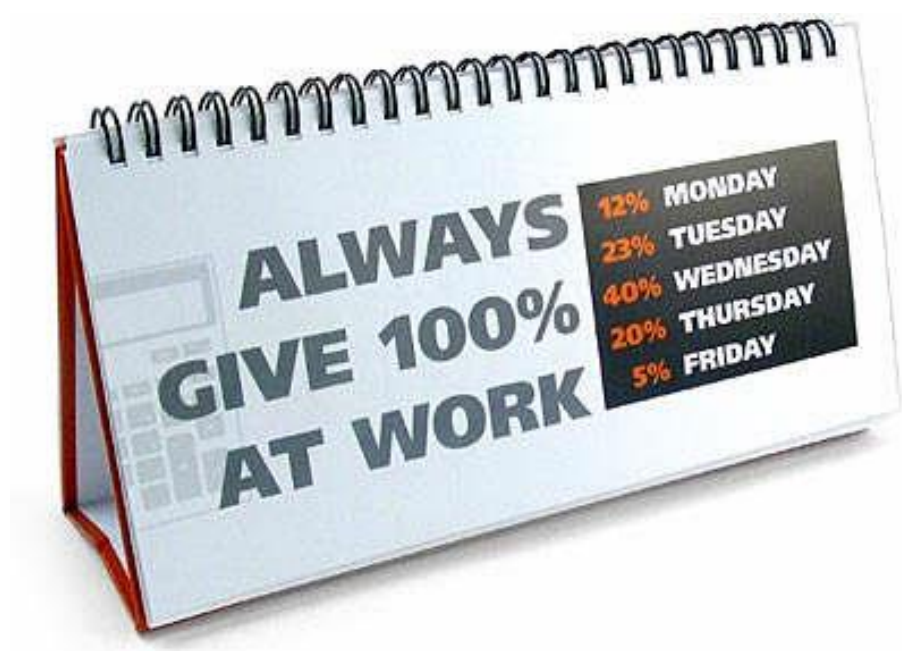
# THE RAM

THE MAGAZINE BY & FOR SERVING  
& EX-RAAF PEOPLE & OTHERS



Vol 51

Page 5





## Out in the shed with Ted.

Ted McEvoy

This page is brought to you compliments of the [Kedron Wavell Services Club](#), Brisbane's superior Club.



## "Why don't women have Adam's apples?"

One of those thorny questions that worries absolutely everybody and causes loss of sleep to thousands is, "*What the devil is an Adam's apple and why don't women have one?*"



Well! - firstly, the Adam's apple, or to use its doctor's name, the "*laryngeal prominence*", is the lump or protrusion that is formed by the angle of the thyroid cartilage surrounding the larynx (the voice box). It is the lump you can sometimes see in the middle of a man's throat and it gets its name from the biblical story of the Garden of Eden. According to legend, Adam got a piece of the forbidden fruit stuck in his throat and since then all men have had to bear witness to Adam's fall from grace. For males, the noticeable bump of cartilage starts to become evident during puberty, when the voice box gets bigger. The

reason it's there is to protect the walls and the frontal part of the larynx, including the vocal cords which are located directly behind it. It also controls the deepening of the voice. During a male's puberty, the thyroid cartilage and the larynx grow, forming a large soundboard which is why a male's voice gets deeper as he matures.



And here's the answer to the second part of the question, believe it or not, women also have one which immediately leads to a trickier question, why can't we see it in the fairer sex!!!

In an adult men it is usually clearly visible and palpable. In women, the bump is much less visible and is hardly perceived on the upper edge of the thyroid cartilage. The meeting point of the two portions of the cartilage generally forms an acute angle (of about 90°) in men, while in women it forms an open arc (of about 120°).



Girls' larynxes grow, too, but just not as much. As a result, teenage girls and women tend to have higher voices than their male counterparts and they usually don't have noticeable Adam's apples – though some do! The appearance of an Adam's apple (or what looks like one) in a woman is usually due to a number of reasons. Sometimes, it's an anatomical anomaly, genetic trait or the result of a hormonal imbalance that occurred during puberty. Or it may not be an Adam's apple at all – it could be an unrelated growth caused by a health condition.

There! I bet that's a load off your mind!!

## Agent Orange.

A new official account of the Agent Orange Controversy has been commissioned. The current Official History of the Agent Orange controversy is fatally flawed and unjustly insults the veterans who campaigned for the Repatriation system to acknowledge its harmfulness. The present Official History omits findings of the Agent Orange Royal Commission supporting the veterans case. In the first place, the history omits a Royal Commission finding that, under the standard of proof prescribed by Repatriation law, there were two categories of cancer attributable to exposure to Agent Orange. The history also omits the Royal Commission finding that the Department of Veterans Affairs purposely disobeyed Repatriation law in not allowing veterans the prescribed benefit of the doubt.



The history goes so far as to accuse the campaigning veterans of dishonesty and greed. Of course, the veterans turned out to be right about the harmfulness of Agent Orange. Their behaviour, far from being dishonest and motivated by greed, was a fine example of the ANZAC tradition of veterans looking after their comrades-in-arms.

So it is wonderful news that after years of campaigning, the Australian War Memorial Council has agreed to commission a new study titled:

*Medical Legacies of South East Asian Conflicts Vietnam War.*

Dr Peter Yule of Melbourne University has been chosen to head the study and it is estimated the task will take him four years. It remains to be seen whether the new history will redresses those omissions and insults. We can only hope so.

The new volume will include other medical legacies such as Post Traumatic Stress Disorder.

Regards,  
Jim Wain  
National President

Decades after the Vietnam War, the US Government has finally admitted that Agent Orange poisoned troops. The US Department of Veterans Affairs has acknowledged that Monsanto's Agent Orange, a herbicide sprayed over 4.5 million acres across Vietnam during the conflict, was responsible for health ailments in a group of as many as 2,100 veterans. It had previously denied such allegations. See [HERE](#).

Nescafe manages to arrange a meeting with the Pope at the Vatican. After receiving the Papal blessing, the Nescafe official whispers, "Your Holiness, we have an offer for you. Nescafe is prepared to donate \$100 million to the church if you change the Lord's Prayer from 'Give us this day our daily bread' to 'Give us this day our daily coffee.' The Pope responds, "That is impossible. The prayer is the word of the Lord. It must not be changed." "Well," says the Nescafe man, "we anticipated your reluctance. For this reason we will increase our offer to \$300 million."

"My son, it is impossible. For the prayer is the word of the Lord, and it must not be changed." The Nescafe guy says, "Your Holiness, we at Nescafe respect your adherence to the faith, but we do have one final offer..." "We will donate \$500 million - that's half a billion dollars - to the great Catholic Church if you would only change the Lord's Prayer from 'Give us this day our daily bread' to 'Give us this day our daily coffee.' Please consider it." And he leaves.

The next day the Pope convenes the College of Cardinals. "There is some good news," he announces, "and some bad news. The good news is that the Church will come into \$500 million." "And the bad news, your Holiness?" asks a Cardinal.

"We're losing the Tip Top Bread account!"





## Planning an event??

Kedron-Wavell Services Club Inc. is a unique one-stop venue that can satisfy all of your event requirements. Whether you are planning a corporate seminar, workshop, meeting, reunion, business launch, cocktail party or dinner, the Club offers a variety of function rooms to cater for 15 to 500 guests.

Their point of difference and areas of expertise includes:

- A specialised Events Department where an experienced supervisor is appointed to ensure that your event runs smoothly from start to finish
- Room set-ups and layouts, including theming
- Catering and banquet menu planning
- Audio visual planning
- Entertainment suggestions
- Co-ordination of recommended vendors and suppliers
- Advice and information on the best pre and post event activities for guests
- Assistance with transfer or accommodation requirements.



Technical equipment and services they have:

- Corded, radio and lapel microphones
- Whiteboards and flipcharts
- LCD data projector

- Colour monitors
- Screens (up to 4m x 3m)
- Photocopying and faxing services
- Lighting and sound technicians for the Blue Pacific Room
- Free standing velcro screens
- Wireless Internet access
- Pens and notebooks.

You can download their full Events Package [HERE](#) which includes room specifications, menu's, facilities details, services offered, room hire etc. Virtual tours of all their rooms are now available, to view virtual tours click [HERE](#).

## Defence Exposure Evaluation Scheme (DEES).

The attached Power Point presentation (Click [HERE](#)) has been put together to provide up to date information to all members that may have been exposed to aviation fuel in the course of their duties.

You can get more info [HERE](#).

## Replacement Medals

The Department of Defence has recently revised its replacement medals policy. Prior to 2003 lost, stolen or destroyed medals could only be replaced directly to the individual who earned them. In 2003, this policy was extended, allowing replacement when deceased individuals' service awards were lost in specified natural disasters. In December 2004, the Minister for Defence agreed to a revision of this policy, which now allows for the medals of deceased individuals to be replaced in the following circumstance:

- Replacement medals will only be issued to the holder of the deceased individual's medal/s. The medals cannot be replaced in the circumstances where an individual has died and the medals cannot be found.







- The loss, damage or destruction of the medals occurs in circumstances beyond the control of the holder of the medals: for example as a result of a house fire or theft.
- The loss, damage or destruction occurred after 1 December 1974.

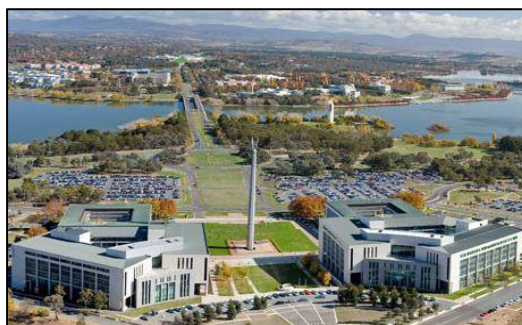
Defence can only replace medals it is authorised to issue. As such, it cannot replace honours or decorations that were issued under the Imperial or Australian honours system, such as meritorious and gallantry awards, or foreign awards. However, replicas of these awards may be purchased from a commercial medals dealer.

Medals replaced by Defence will be engraved with the initial "D" to denote 'duplicate' unless the damaged original medals are recovered and returned to Defence.

To apply for replacement medals, claimants may complete the online application form, which is available on the Defence Honours and Awards website [HERE](#)

Alternatively, the application form can be downloaded from the website to be completed and then returned to the:

Directorate of Honours and Awards  
CP2-1, Department of Defence  
PO Box 7952  
Canberra BC ACT 2510



Claimants are to include with their application form a statutory declaration describing the circumstances of the loss or damage. Additional evidence such as police or insurance reports, and any evidence showing proof of the claimant's relationship to the original recipient would also be useful in assessing eligibility.

The revised replacement medals policy does not affect currently serving or former members of the Australian Defence Forces who are still living. Defence will replace the medals for living recipients except when they have been sold, gifted or otherwise supplied to another person.

**Atheism:** The belief that there was nothing and nothing happened to nothing and then nothing magically exploded for no reason, creating everything and then a bunch of everything magically rearranged itself for no reason whatsoever into self-replicating bits which then turned into dinosaurs.



## Fuel Saving??

howstuffworks

Walk down the aisles of almost any Supercheap, Repco, AutoPro or other automotive store and you'll see a lot of products that propose to help your car in a number of different ways. But like anything you buy, not every claim a product makes on the packaging comes true. During times of rising petrol prices, which seems to be all the time, vehicle owners are on the lookout for a well-priced product that would work and could save them a few dollars in the long run.

There are lots of products in the car market that claim to increase or restore the fuel mileage in your vehicle. There are fuel additives, air bleed devices, liquid injection and even magnets all claiming to get more out every gallon of petrol. Some of them claim to clean out your engine and as a result restore your engine's fuel economy. Others claim to change the molecular structure of the petrol, heat or cool it, or just add air to it to make it last longer. But do any of them actually work?



Here's five different products that claim to improve your mileage which have been tested to see how well they work, if at all. Some may minimally increase your vehicle's mileage, but it may be so small that you won't even notice the difference, except in your wallet. Other products can actually be harmful to your engine as well, so before you buy any fuel saving system or additive, read on.

The most common products that claim to add some extra MPGs onto your drive are the pour-in-your-tank additives. You'll see almost an entire shelf devoted to them at the car parts store and most of them have two basic claims. The first is that they clean out parts of your engine and the second is that they increase or restore mileage because of or in addition to, the first claim.

Of course, whether or not the additives truly help clean out parts of your engine would be difficult for most vehicle owners to actually prove. Some of the areas these additives claim to clean are not easily accessible to the person buying them and therefore hard to properly evaluate on a case-by-case basis. Or, if they do clean the engine, the change is so insignificant that it has no effect on the engine's mileage. Some people put these additives into their vehicles at every fill-up and others may only do it occasionally, but either way you're most likely not getting what you've paid for. Even if the additives do clean areas of your engine like they say, according to the US EPA's tests there are no additives you can put in your car that will increase mileage. The EPA in the US tested 14 different fuel additives and none of them were proven to have any positive effect on a vehicle's mileage. You'd be better off saving the few dollars you'd spend on the additives and actually buying a litre of fuel with them.





But additives are just one category of products that claim to increase your mileage. A more sophisticated approach to adding more klms to each litre of petrol comes from the air bleed and vapour bleed devices. An air bleed device sends additional air into the carburettor (on older cars) or into the injector system. They are typically installed on the positive crankcase ventilation (PCV) line or replace the idle-mixture screws. The EPA has tested more than 20 air bleed devices and has found only one that slightly increased fuel mileage, but at the cost of increasing exhaust gases.

A vapour bleed system, sometimes referred to as a mixture enhancer, works in a similar way but instead of just adding more air, it vaporizes the fuel going into the inlet manifold. Some vapour bleed systems work by taking liquid fuel on its way into the engine and mixing it with air from a pressure line. The pressurized air and fuel mix together in a chamber until the fuel becomes vaporized and is then released into a line that feeds into inlet manifold. The idea behind vaporized fuel is that the engine will burn the fuel more completely, not wasting any of the fuel and so increasing the mileage of each litre. As opposed to the additives, these systems need to be installed in the engine compartment and certain modifications and additions added to the engine. Out of all the vapour bleed and mixture enhancer products that the EPA tested, not one of them showed any improvements to gas mileage.



The idea of liquid injection comes from war planes during World War II. Fighter planes would inject a water, or water and alcohol mixture, into the combustion chambers of their engines in order to cool the air their turbochargers were warming. In addition to the turbochargers heating the air, the sheer altitude of the planes meant that the air going into the engine was less dense than air near the ground and therefore there wasn't as much of it to cool the engines. The pilots would temporarily send water, or water and alcohol, to the combustion chamber to cool the air down and create more power to the engine. Since then, some auto manufacturers have tried to use the same idea in vehicles, but with no proven results. Kits that you can buy don't inject water directly into the combustion chamber but rather send it to the fuel and air intake system.

A few writers from Popular Mechanics installed a system into one of their trucks with less than stellar results. Their water injection system used the intake manifold to pull water from a bottle into the manifold. They found that that the truck not only had a decrease in power when the water injection system was installed, but they also saw a decrease in fuel economy by 20 percent. Not exactly the results you want when you're trying to save money. The EPA had better results with a liquid injection system they tested, but not enough to significantly increase fuel economy. They found only one liquid injection system that improved the gas mileage by a "very small" amount.

Many of the so-called fuel-saving products on the market like to talk about increasing the efficiency of the fuel being consumed in the combustion chamber. An engine ionizer falls into this category. The ionizer has a set of rubber clips that attach to each of the spark plug wires near the cylinder heads. It consists of one rubber clip for each cylinder that supposedly harnesses a "corona charge" which is a charge that gets transferred from the firing cylinder to another cylinder. The claim is that this charge then causes "a partial breakdown in the larger hydrocarbon molecules in all the non-firing cylinders, resulting in increased combustion efficiency."

In addition to better mileage, some of these products also claim increased horsepower, reduced emissions, a smoother idle and better starts (and whiter whites??). When put to the test by Popular Mechanics, the test had to be abandoned due to a fire, which was caused by the product. The ionizing rubber blocks attached to the spark plug wires began melting onto the manifold and caused flare-ups similar to what you might see when you're cooking a burger over a grill, which is not exactly what you want inside your engine bay. Not only did it cause a fire, but the test also showed a decrease in horsepower while the ionizer was attached.

One of the Web sites that sells an engine ionizer claims that vehicle owners can save \$500 to \$1,000 a year using the device. That's a pretty tall order considering that a magazine for mechanics had to stop testing it because their car caught on fire.

Magnets are a reoccurring theme as a solution to all of life's problems, but if you're thinking about using magnets to increase your gas mileage, you should think again.

Here's how the magnet products supposedly work:

The magnets attach to the outside of your fuel line, sometimes inserted inside and they are supposed to break up clumped fuel particles so they can burn more efficiently. As with all the other products we've mentioned, this is simply not true either. Tests of magnets on fuel lines have shown no improvement to a vehicle's mileage. In addition to the magnets not working, the idea that fuel inside of the engine isn't burning efficiently is a bit flawed to begin with. US Government tests have shown that 99 percent of the fuel that goes into your engine is burned up, with only 1 percent being leftover. If any of the products could actually cause an engine to burn fuel more efficiently the percentage would be so small that it would hardly be noticeable or worth the cost.



Real fuel saving measures have to be earned the old fashioned way. Drive to the speed limit, remove excess weight from the car, keep the engine in good working condition, combine errands, use cruise control and keep from extreme driving habits like jack-rabbit starts. You should treat the accelerator pedal as if it was made of egg shell – go easy on it. Saving money on fuel is like getting into shape. It takes some discipline and there are no quick fixes to get the results you want.



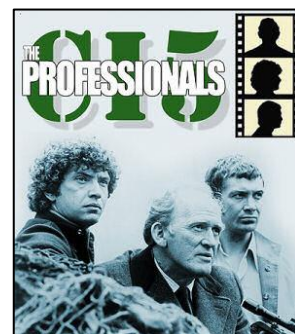


## Dam busters.

The Dam Busters was a British Second World War film, made in 1955 and starred Michael Redgrave and Richard Todd. The film supposedly recreated the true story of Operation Chastise when in 1943 the RAF's 617 Squadron attacked the Möhne, Eder and Sorpe dams in Germany with Barnes Wallis's "bouncing bomb". The film was based on the books "Enemy Coast Ahead" (1946) by Guy Gibson and "The Dam Busters" (1951) by Paul Brickhill.

While the film was great to watch, how accurate was it??

Actor Martin Shaw, known for his roles in the two recent television series Judge John Deed and Inspector George Gently and a million years ago as Ray Doyle in The Professionals, is also a pilot and owner of a WW2 vintage Piper Cub which saw action at Dunkirk. He has a passion for vintage aeroplanes and aviation in general and has often wondered about the authenticity of the film – he decided to "make some enquiries" in a bid to separate the facts from the myths surrounding the famous tale of enormous courage and ingenuity and perhaps the most daring attack in the history of aviation warfare.



In order to get to the truth, he decided to retrace the route taken by 617 Squadron back on 1943 and take a fresh look at one of the most famous war stories of them all. He met with and spoke to the last living RAF veteran of the mission, as well as a survivor of the tsunami that was caused by the Moehne dam's destruction and also met with the secret wartime girlfriend of 617 Squadron's CO, Guy Gibson.

It is a very interesting story and you can see it [HERE](#).

## PS.

Les Munro, the last WWII Dambusters' pilot, died in his native New Zealand on the 1<sup>st</sup> August, aged 96, following a spell in hospital with heart problems.

Eight aircraft and 53 of 133 crew were lost in the raid

Speaking to the RAF in 2013, Munro said "From an operational point of view the raid was successful but the main point in my opinion was the morale of the English people. The land war



hadn't been going to well so the success of the dams' raid was a great boost to the English people." But he said the mission left him and his crew with a bittersweet feeling of success. "Those that survived were disappointed so many had lost their lives; there was a certain degree of sadness by those that had come back. We were losing crews on ordinary squadrons before we got to 617 Squadron; seeing their crews they were drinking with one evening and were not there the next evening, you become accustomed to it and you couldn't allow that to affect your ability to operate the next day. The crews that did survive celebrated the fact that the Mohne and the Eder had both been breached and the main objective of the operation had been successful."

## Virus.

Currently there are very aggressive virus emails circulating that are currently bypassing all anti-spam and anti-virus software platforms. These emails are supposedly coming from Australia Post, Coles, Bunnings, Woolworths and many other companies, all with the angle that there is a voucher or a delivery waiting for you.

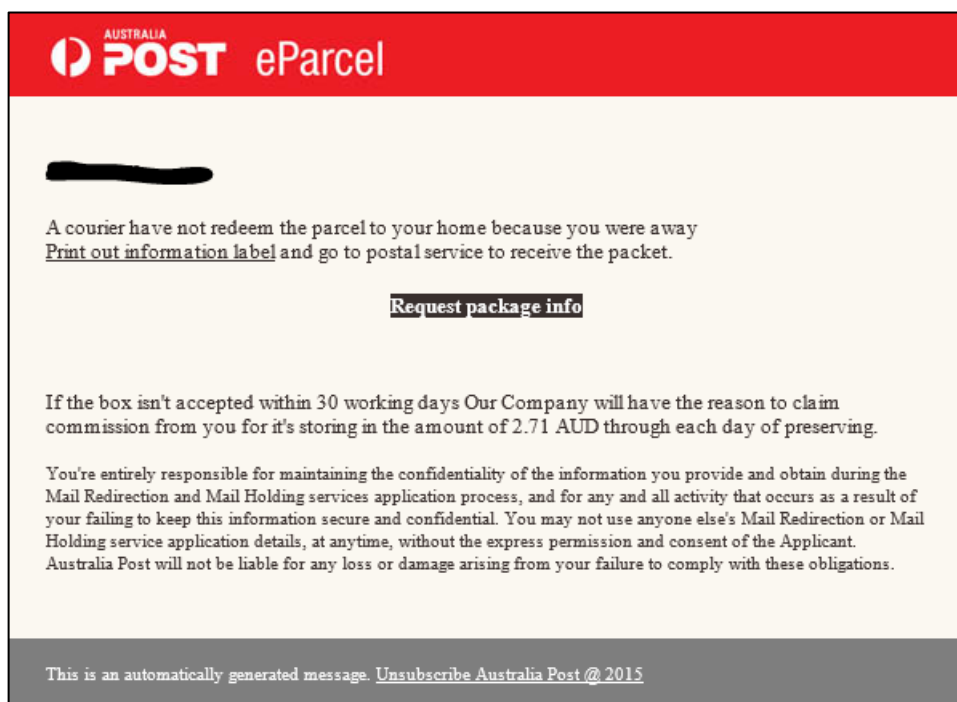
If you receive one of these emails, do not open them, instead **DELETE THEM IMMEDIATELY**. If the software that it asks you to download is run, it will encrypt all files on your local PC and network, and the only way to recover them is to pay ransom money, or recover from backup.

Remember **NOBODY** is going to give you something for nothing ... be warned. **ENSURE YOU DO NOT DOWNLOAD OR RUN ANYTHING, FROM ANY LINK, IN ANY OF THESE EMAILS**

Here is what some look like:







## Pensions.

The Minister for Veterans' Affairs, Senator the Hon. Michael Ronaldson, announced the new pension and income support payment rates for veterans, their partners, war widows and widowers across Australia which would apply from 20 September.

As pensions are paid on a daily basis, the next payment, which falls on 1st October will be paid partly at the old rate and partly at the new rate. The first full payment at the new rate will occur on the 15th October 2015 though you'll hardly notice the difference - the new rate is a miserly 0.787% increase over the March rate. It means a TPI will receive an increase of 74 cents per day!!!! Thanks for your service!!! bloody hell...

The ADF is prepared to pay its young men and women an extra \$57.50 a day when it sends them to a war zone, but if they get injured while there and can no longer work, it seems to just wipe its hands and forget them. A young man or woman, who is injured while on active service, and who is discharged as a TPI, can expect to spend the rest of his/her life living in near poverty conditions - it's just not good enough!!!!

Minister Ronaldson released a [press release](#) showing the increase in pensions from Sept 2013 as being 4.8%, why do that, what has that got to do with anything?? It was probably to give the impression that the Government was being very generous - who knows!!

The ABS CPI figures for the [March quarter](#) (1 March 2015 - 30 June 2015) show an increase in the CPI of 0.8% and it seems the Government has used this quarterly figure (0.8%) as a multiplier over the March pension rate to arrive at the new rate. The second quarter (July - Sept) CPI figures will be released by the ABS on the 28th October and if (and you can bet they will) these figures are greater than zero, then those in receipt of and who rely on the disability pension will be further behind.

It's our opinion that pensions should be adjusted quarterly, not half yearly, and they should be adjusted after and in accordance with the quarterly CPI figures. At least that way recipients would stay current and not fall behind each 6 months - you can bet the polities would not allow their pensions to be eroded every 6 months.

Pension	Old Fortnightly rate	New Fortnightly rate	Increase
Special rate (TPI) Pension/MRCA Special Rate Disability Pension	\$1,320.50	\$1,330.90	\$10.40 0.8%
Extreme Disablement Adjustment	\$729.30	\$735.10	\$5.80 0.8%
100 per cent General Rate of Disability Pension	\$469.40	\$473.10	\$3.70 0.8%
50 per cent General Rate of Disability Pension	\$234.70	\$236.55	\$1.85 0.8%
Intermediate Rate Disability Pension	\$896.40	\$903.50	\$7.10 0.8%
Service Pension - Single	\$860.20	\$867.00	\$6.80 0.8%
Service Pension - Couples	\$1,296.80	\$1,307.00	\$10.20 0.8%
War Widows/ers Pension	\$874.10	\$880.90	\$6.80 0.8%
Income support Supplement	\$257.80	\$259.90	\$2.10 0.8%



# THE RAM

THE MAGAZINE BY & FOR SERVING  
& EX-RAAF PEOPLE & OTHERS



Vol 51

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Blessed are those who are cracked,  
for they are the ones who let in the light!



Ok, Ok!! – I'm going back to my room now!!



## My Story.

### Carolyn Wilson (Nee Forday)

Carolyn grew up in Rockhampton, Queensland and remembers touching on the subject of the Defence Forces in her Citizenship class in high school. At the time she thought it sounded exciting and adventurous always knowing she wanted to experience life outside a country town.



After she left school, she worked in a number of jobs, for a while with a Wholesale Merchant, then in a Solicitors' Office and finally she joined the Queensland Public Service, starting in the Police Department then with the Department of Works. While at the Solicitors' Office, she had been encouraged to join the Qld Police by some of the Police Officers with whom she had worked.

While she was with the Police Department she worked in their Communications Centre, which she loved and that got her thinking. She remembered the lectures on the ADF from her school days and it was then that she decided she would love to join the RAAF doing something similar to what she was doing with Qld Police. She talked it over with some of her work mates, who encouraged her to apply, however, she was a little worried about passing the height requirement. She submitted her application and finally the day came, she had been accepted. Not being a morning person, she says she can still remember her mum saying, "you'll get into trouble, you'll never get up in the morning!"



She enlisted in the WRAAF on the 28<sup>th</sup> February 1977, as a TRINOP/C and underwent WRAAF training at WTU RAAF Base Laverton on rookies [course 245](#). She found rookies was quite a learning curve and an eye opener and being on such a large recruit course (approx 92 girls) she is sure they stretched the WRADNCO's. Course 245 was featured in the Queen's Silver Jubilee edition of the RAAF News in April 1977 as the largest rookies course since World War II. She thinks there were only a handful of WRAAF rookies courses after hers before the disbandment of the WRAAF that year.

After graduating rookies she was posted to Radschool for her TRINOP/C course which became [1 COMMSOP](#) course due to the amalgamation of the WRAAF into the RAAF.





1 COMMSOP course was a very happy go lucky/disruptive course at Radschool and she is sure the Radschool WOD at the time even enjoyed a few laughs at their expense. As she was a typist before she joined, she found it very frustrating watching all the other members of her course struggling with the keys. During one of their typing tests she didn't realize she had been set up by the practical jokers off the course. They had put a tube under her KTR (Keyboard Typing Reperforator) and were blowing smoke into the tube. As she was always trying to better her words per minute she didn't notice that everyone had stopped typing and were rolling around on the floor laughing. Everyone ended up being on the end of some sort of joke at some stage during the course. She says it was all in good fun!

Another incident she remembers, that stands out while at Radschool was when they had to march down to the cinema on base. The girls marched down as a combined COMMSOP/RADTECH/T flight but having short legs, Carolyn found it very difficult to keep up with the rest of the flight. By the time they reached the cinema she was so exhausted by the pace she was on the verge of collapse.



When the time came to return to the class-room, the WOD pulled her aside and told her to walk back under her own steam. As she casually walked back all the trainee flights passed her! She can still remember having a quiet chuckle to herself! Her lack of height also had her being taken off an AOC's parade in Wagga. The SADMINO at the time took her off for being too short! She had volunteered to do it as the LAC she worked with had been nominated for all the ceremony parades up to that point and she felt it should have been her turn.



After graduating from Radschool, she was fortunate to experience wonderful postings to Townsville, Darwin, Wagga, Butterworth, Richmond, Laverton, Victoria Barracks and Glenbrook and was lucky to be attached to 2CRU, Base Sqn Point Cook and Base Sqn Fairbairn also.

She still considers her most memorable postings were to Townsville and Butterworth.

She says, after graduating from Radschool it was her privilege to be one of the first of two females to be posted to Base Sqn Townsville COMMCEN since World War II. Being previously an all male environment she learnt a little while later that all the girlie posters in the COMMCEN and tech workshops were removed and swearing was to be curbed! She was also one of the first females to be trained in Air Operational Communications Centre Townsville (AOCCTVL).

While posted to Townsville she enjoyed such activities as:

- Flying over to Magnetic Island in an Iroquois helicopter with 35SQN for a squadron picnic then cruised back on the RAAF crash launch VKRV.
- 13 hour surveillance mission on an Orion (P3) – she says “they had the best rations on board”.
- A jolly in a Chinook.
- RAAF/Army (female) bivouac which was pretty well a holiday camp!

While on posting to Base Sqn Wagga, Department of Air (DEFAIR) changed their policy to allow single/married female non-commissioned ranks to be posted to Butterworth. (See [HERE](#)) She immediately changed her posting preferences and was fortunate to be one of six females to be posted to Base Sqn Butterworth in December 1984. She had the privilege again of being the first female in the Butterworth COMMCEN. Some of the other female musteringings to be posted to Butterworth at the same time were RAAF Police, Dental Assistants, Clerk



Medical and Airframe Fitters. The single female accommodation was located on base next to the RAAF primary school.



Carolyn says Butterworth was a wonderful two year experience. It was the best opportunity to serve in another country and experience the local culture. Being of Asian descent it brought home the fact I was lucky to be born in Australia. Travel, different cultures, food and shopping enriched my life experiences.

Whilst posted to Butterworth she met her future husband Mark.

She was posted back to Australia before Mark and they spent



some time apart before they were co-located in Melbourne. Mark was accepted on a SYSTECH course at RMIT which meant he would be in the Melbourne area for at least 18 months and Carolyn had been posted to Richmond from Butterworth. She will always be grateful to FSGT Merv Vivienne for making that call to Canberra to help her co-locate with Mark.

In 1988 she and Mark bought their first house in Werribee and spent a total of 8 years in the Melbourne area. She was posted to various positions within St Kilda Road and Laverton (which became RAAF Williams). In February 1991, she and Mark were married and had their first daughter Nicole in Feb 1993.

During her absence on Maternity leave the amalgamation of the COMMSOP and EDPOP mustering to CISCON occurred and when she returned to work, she was posted as a CISCON to the Data Reporting Section at Headquarters Logistic Command Unit (HQLCU). This in itself was a very big learning curve. She had some very challenging times as a CISCON in Melbourne not only professionally but personally.

Mark was posted unaccompanied to Air Transport Telecommunications Unit (ATTU) now 1 Combat Communications Squadron (1CCS) and she was not co-located until 12 months later. Not long after they were co-located in Sydney, Carolyn went on Maternity leave again and their second daughter Vanessa was born in September 1996.



She finally discharged from the RAAF in July 1997 after serving 20 years and 5 months.

When putting this story together, Carolyn dragged out the old RTE (Record of Training and Employment) book she had religiously kept up to date while serving. She says it helped her enormously. She says back then it was a requirement and although it was not all that valuable to anyone after their discharge, it is a nice reflection of one's career....

Looking back, she says she thoroughly enjoyed her time in the RAAF and has many fond memories of people she worked with and met during her many postings.



Another aspect of the RAAF which she misses is the many different social functions she was lucky to enjoy. CPL/SGT's, SGT's/Officer's Xmas drinks, SGT's Mess Children's Xmas treat, Balls and Dining-in nights (SGT's mess), Base Sqn Butterworth Ball, 3SQN Ball, 1AD closure Ball and many many more.... [Nancy Wake](#) (The white mouse) was guest speaker at a dining-in night she and Mark attended at Laverton one night some years ago and she is sure that all who attended that night will no doubt have wonderful memories of Nancy Wake.



She and Mark have attended the last three Djinnang Reunions in Brisbane and experienced catching up with old friends. Finally putting faces to names. She says the reunions have gone from strength to strength, with so many happy memories for most and maybe not so good memories for some! A lot of people have been out longer than they were in now!

She adds, "I have to say that with the amalgamation of the COMMSOP and EDPOP mustering, I felt I wasn't suited to be a CISCON and I am sure many who experienced both areas of the CISCON mustering will agree or maybe not agree with me. Not everyone who became a CISCON had the aptitude. The days of the KTR and tape were fun but technology moves on.....

I have been a full time mum since discharging in July 97. Life on the Gold Coast is good and looking forward to the day my husband retires so we can go travelling!"





## The opening of Radschool. 03 December 1974



Fred Griffiths sent us this. This is the program that was produced on the opening of the new Radschool building at Laverton on the 03 December, 1974.

You can get a copy of it [HERE](#)

## RAAF Vocabulary of Stores.

Most blokes and blokettes that served in the RAAF were familiar with L-Group – it was one of the first places you went to when you joined up and it was also always on the clearance in/out sheets when you were posted from one unit to the next, but why was it called that and what does L-Group mean anyway? Everyone knows that L-Group is where you got your clothing and bedding issue/replacements but apart from the equipos, no-one gave it a second thought. L-Group was in a big shed somewhere and most people probably thought the shed was called L-Group but no, we've since discovered that that is wrong.



Another RAAF peculiarity to which no-one gave a second thought was the numbering system on all the RAAF's aeroplanes. Now numbering aeroplanes is a logical and sensible thing to do, like, if you're at Willytown and there was a bunch of Mirages on the line and you were told to go and fix one, how would you know which one to tackle unless it had a number on it, they all looked the same. So, to help out the poor old mechanic person, the RAAF put numbers on them but it also put the letter A in front of all those numbers and it didn't matter if the aeroplane was a Winjeel or a Herc or a Mirage, they all had that letter A as the first part of the number – why??

Well, we've lost hours of sleep at night wondering about this so we decided to ask an old equippo mate if he knew and after he'd called us a dopey radtech and a few other nasty things, he told us.

It seems everything the RAAF had (except for its people) was classified into 26 different groups and each group was given a letter of the alphabet to distinguish it from another group. For instance, "**A**" group contained all the RAAF's aircraft. "**B**" group contained all the RAAF's aircraft engines and so on – it was called the "Vocabulary of Stores" and it was one of those secrets that was talked about in the equipo's smoko room – but never outside amongst ordinary people. So, if you wanted to order half a dozen Hercs, you just looked up the Appendix 20 for



the part number, which would have been A97, and bunged in your order – next day, 6 Hercs would have been delivered. Simple!!

We asked our mate for some more examples and he gave us the full list, you can see it [HERE](#).

Devilishly clever people those equipos.

## 2 Squadron and Vietnam Vets Day

18 Aug 2015

The Bribie Island (north of Brisbane) chapter of the Vietnam Vets Association recently invited the 2 Squadron Association (Queensland) to participate in their Vietnam Vets Day march and ceremony, to be held in the Vietnam Veterans Memorial Park (VVMP), in front of the Bribie Island RSL on the 18th August, 2015. The 2 Sqn Assoc were only too happy to accept and they invited us along.

The 18<sup>th</sup> August was a Tuesday and everyone was asked to assemble at 3.30pm outside the Bribie Island Sports Club for a 4.00pm march down to the VVMP, about 300 metres away.



As distinct from an ANZAC Day march, people were not grouped in either their Service or Unit, instead they formed one large group as Vietnam Veterans led by three flag bearers, one for each service.





The RAAF Flag was carried by Trevor Reed. Trevor, who turned 86 early in Sept, was a WOE and spent a lot of time in Butterworth with 1 Sqn as well as a short stint in Vietnam in 1971 at RAAF HQ in Saigon. He's worked on numerous types of aircraft, including Lincolns, Wirraways, Mustangs, Mirages, Canberras and way back, the Tiger Moth.



Music for the march was supplied by the great little marching band from Banksia Beach State Primary School.





After the march, everyone congregated in the Vietnam Veterans Memorial Park to commemorate the 49th anniversary of the Battle of Long Tan as part of Vietnam Veterans Day and to remember those that gave their lives in that terrible conflict.



MC for the afternoon was Paul Cooke. Paul, originally from Glen Innes in NSW, was a framie with 2Sqn at Phan Rang from April 1967 to March 1968. As well as 2 Sqn he has spent time with 34 Sqn, 9 Sqn and 2 FTS.







L-R: "Jock" Young, Graham Seymour, "Tiny" Jones.

Jock Young is the Secretary of the Bribie Island Vietnam Vets Association and was heavily involved in organising the afternoon. He started life as a Framie and became a loadmaster on the Caribou. He did two tours of Vietnam where he earned a MID, the first from October 1965 to July 1966, then again from July 1969 to April 1970. After the RAAF he joined uncle Reg and the blue eyed girls and had many years flying as an engineer on Ansett's B727.



The Catafalque Party was performed by the TS Koopa Navy Cadets.

*(A catafalque is a raised box, or similar platform, often movable, that is used to support the casket, coffin, or body of the deceased during a funeral or memorial service. The term originates from the Italian catafalco, which means scaffolding.)*

*The most notable Italian catafalque was the one designed for Michelangelo by his fellow artists in 1564.)*





At the conclusion of the ceremony, the last post was played by these young people from the Banksia Beach Primary School. They did a wonderful job of it too – congratulations to their music teacher..



L-R: Sophie Hyland, Callum Heard, Jack Thompson and Jy Raleigh,

K





## 2 Sqn Committee.



**L-R: Gary Olsen (Treasurer), David Potter (President) Arthur Rennick (Secretary).**

After the Ceremony, everyone was invited across the road to the RSL Club for some refreshment.





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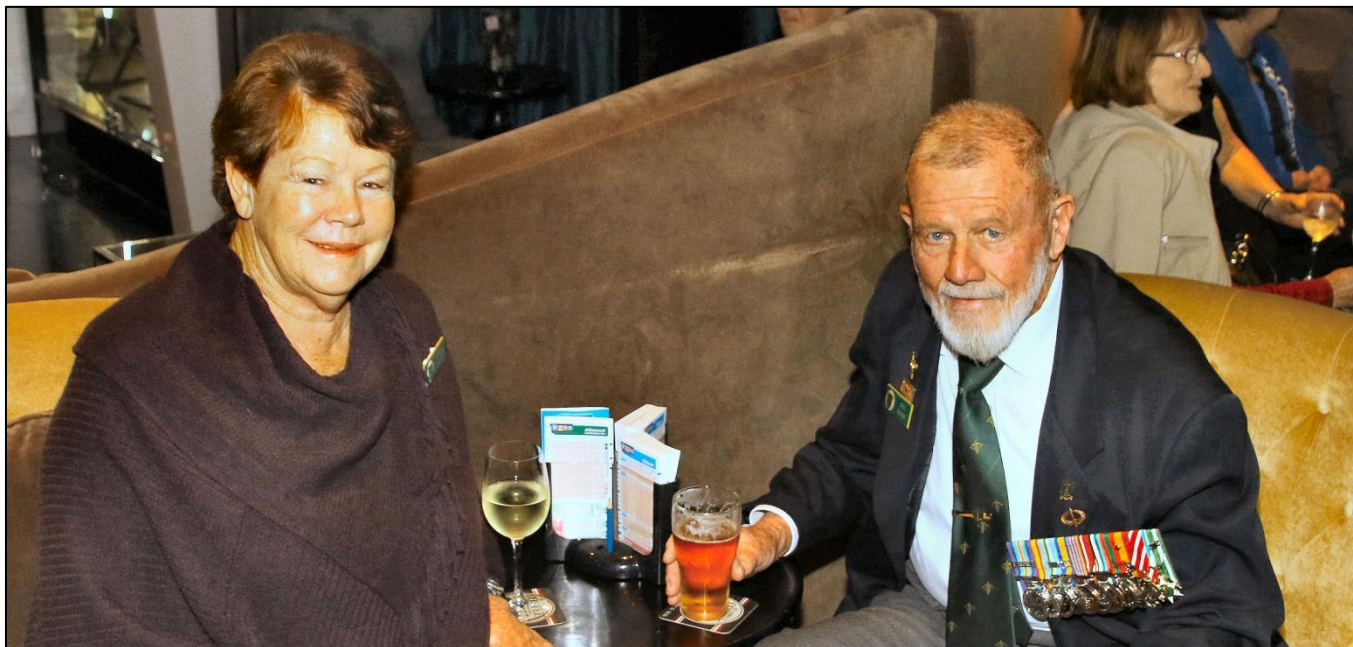


**Back L-R: Evan "Grassy" Hopper, Rod "Curly" Pearce.  
Front L-R: Dianne and Noel Hendrix.**



**Carol Close, Kerry Millard, John Bushell.**





Carol and Des Pryde.



L-R: Lorraine Rutland, Lee Grieves, Suzie Corby.



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L-R: Caren Tucker, Karen Foks, Gwenda Pearce, Dianne Kirby.



L-R: John Rutland, Tom Grieves, "Bazza" Battle, Harry Foks.





**L-R:** John Bushell, Gary Olsen, John Ward, Tom Grieves.



Thelma and Arthur Rennick.



## The People I meet.



Cheyenne Sparke, alluring Radtech, Sharny Cauchgi.

Recently I was down at Windsor (NSW) with many others to attend the [C-27J celebration](#) which was put on by 35 Squadron at Richmond. After spending the weekend at events on the Base, being idolised and often harassed by the meagre musterings, on the Sunday morning, thinking I could sneak away and have a quiet breakfast on my own, I went to Windsor's favourite restaurant, [Boots Bar and Restaurant](#) to enjoy a hearty meal. Unfortunately, the word got out and very soon the place was full of those other trades who continually pestered one's self wanting self to sit at their table to brighten up their meagre lives.

By 9.30am the restaurant was full of those other trades, which put a strain on the Restaurant's staff who were trying to keep up with the huge crowd all wanting to order the same as self had ordered, when someone let slip that the reason there was such a large gathering at breakfast



that morning was because of the attendance of a person radiating Radtechitis. Immediately this amazing fact became known to the wonderful staff, being mere mortals, they were unable to control themselves and immediately shunned the remainder of the restaurant's clientele and draped themselves upon one's self in an attempt to capture some of that appealing Radtechitis.

Fame is such a burden.

## 14 Appy Wagga (Tulips) reunion.

All successful air services, be they commercial or military, are technically-oriented organisations which critically depend on the capacity of skilled staff for their performance. And this expertise relates not only to the personnel who fly the aircraft but equally to the ground-crews, be they mechanical or administrative, who prepare, maintain and support the aircraft in order that they can operate in a safe and efficient manner (*though I've met a few RAAF pilots who thought otherwise – tb*).

During the earliest days of aviation in Australia, as elsewhere around the world, mechanics and other technicians were drawn directly from civil trades and expected to adapt their skills to the new environment in which they operated and as aircraft were very rudimentary machines in those days, this practice was satisfactory. This arrangement still applied when the First World War necessitated raising the number and complexity of military aviation units on a large-scale. At the end of hostilities, both the air corps of the defence forces and civil aviation were able to draw on this well of experienced personnel to both fly and maintain their machines. For as long as the aircraft themselves were of relatively basic construction, this solution remained quite adequate to the requirement. Moreover, for as long as the total size of the aviation industry stayed modest, or the pool of qualified tradesmen in the community sufficiently large, the air force and civil airline companies could usually count on meeting their needs without mounting a specific training program of their own.



In 1920, when the Government first held discussions for the formation of the RAAF, there was no talk of the new service providing more than recruit and regimental training for initial inductees. The pilots who would fly the small number of aircraft would be drawn from those with wartime flying experience. In the case of other trades, it was expected that filling positions in the non-technical grades would 'probably not present any difficulty', while it was 'hoped that sufficient personnel already trained in their particular trade will be forthcoming to fill most of the technical vacancies'. Where deficiencies were anticipated, as with people skilled in seaplane



and flying boat work, one suggestion was put forward that a few of these should be obtained from England. The balance would need to be sourced locally so it was proposed that an Air Force College be formed to train pilots to fly the RAAF's aircraft and that a number of boys aged under 18 might be enlisted and trained in various trades. In a document prepared early in 1925, Australia's first and longest-serving Chief of the Air Staff (Wing Commander Richard Williams) had set out what amounted to a detailed blueprint intended to guide the development of the RAAF for at least the next decade. This noted that the service still made no provision for training 'men or boys in a trade from the commencement' and could only reaffirm the hope that a sufficient number would continue to offer 'who already have the experience at their trade to enable them to pass a trade test'. If this proves not to be the case then the question of establishing training schools will have to be considered. Williams was alluding to the apprenticeship scheme instituted by the Royal Air Force.

When WW2 broke out, the technological advances in aircraft design and the number of aircraft in use leapt forward at a great rate with the result at the end of 1940, the supply of skilled and semi-skilled recruits available to service these complicated machines had been practically exhausted and from the start of 1941 the RAAF was obliged to look to satisfy its requirements by turning unskilled enlistees into competent tradesmen. This involved establishing a three-tiered system of training, first passing recruits for aircraft trades through an eight-week course in basic fitting; followed, as with semi-skilled recruits, by courses in one of the specific areas of aircraft maintenance and, later, upgrading them to higher musters through conversion courses in more advanced systems.



Back in 1936, when it became evident that hostilities were not far off, the RAAF began to increase the number and type of its aircraft which required a corresponding increase in the number of its service personnel. The variety and complexity of these new aircraft required these service personnel to be suitably trained and this stretched its meagre training facilities to the limit. 1AD, which had been formed in July 1921 at Point Cook and which moved over to Laverton in March 1926 was expanded into a Training Depot (Engineering School) in September 1936. At the start of the War, use was still made only of recruits who already possessed technical qualifications and these "tradesmen" were put through a 16 week course which took place at the Training Depot but with civil industry similarly facing expansion to meet wartime demand and competing with the fighting services for skilled men, the RAAF inevitably found it necessary to 'develop other channels of supply', by enlisting less-qualified men and putting them through several successive courses to bring them up to the required level.

In December 1939 the Engineering School was subdivided and moved, with detachments sent from Laverton to take over the Melbourne Junior Technical School in Latrobe Street, West Melbourne and also the Melbourne showgrounds at Ascot Vale. Initially established as sub-units of the Training Depot, in 1940 these became No. 1 School of Technical Training (1SST) and No. 1 Engineering School.





The formation of 1STT was directly related to the strategy of making maximum use of existing civilian teaching resources in the expanded training effort. Facilities such as State Technical Schools assisted by conducting the multitude of special courses that were necessary before passing trainees on to the Engineering School to equip them with service-specific skills. Thus courses run by 1STT were held at the Melbourne, Brunswick and Footscray technical colleges and the Amalgamated Wireless Australia (AWA) School. In March the following year 1STT occupied the Exhibition Building in the inner Melbourne suburb of Carlton and the focus of training was shifted there. Five similar schools were set up around Australia during the rest of 1940, No. 2 in Canberra; No. 3 at Ultimo (Sydney); No. 4 at Adelaide; No. 5 in Perth; and No. 6 in Hobart. The last of these had a relatively brief existence, being raised in August 1940 and disbanded at the end of November 1941. A No. 7 STT was subsequently formed at Geelong, Victoria, in June 1942 and continued to operate until the latter half of 1945, when all these schools were closed.



During the course of the war, over 65,000 personnel were given specialised training at STTs in the 120 musters into which the RAAF graded its airmen. Many of the trainees were women, after more than 70 of the service's trades were progressively opened up to members of the Women's Auxiliary Australian Air Force (WAAAF) which was formed in 1941. In addition to the courses run by the RAAF's own schools, other training was carried out for the service within various civilian institutions. As early as August 1939, for instance, the Air Board had arranged with the Melbourne Technical College (MTC, subsequently known as the Royal Melbourne Institute of Technology or RMIT) to start running a W/T operator mechanics course that met service requirements.



Although the RAAF was first off the mark, it was not alone in recognising the great importance of places like MTC in meeting service needs for skilled technicians. By the end of the war just on 100,000 members of all three armed forces had passed through some 80 different types of courses conducted at 60 technical colleges and schools around Australia.



At the outbreak of peace in 1945, the RAAF's greatly reduced need for the output from its numerous training facilities led to a predictable contraction in the number of these establishments. There was, however, no question of dispensing with them altogether, even though the chief catch-cries of the immediate post-war period seemed to be 'disbandment', 'demobilisation' and 'caretaker basis only'. The fact was that the existence of the war had not been wholly responsible for the creation of all these specialist training schools anyway, since this was a trend already evident well before 1939. The need for such establishments actually derived from the increasing technical complexity of air force equipment, with the consequent need for personnel trained beyond the levels readily obtainable solely through recruitment of civilian tradesmen. This was a development which the war years had exacerbated and hastened, quite apart from massively expanding in scale.

In September 1942 the Director of Technical Services at RAAF Headquarters, Air Commodore E.C. Wackett, had been appointed to the Air Board in the newly-created post of Air Member for Engineering and Maintenance (AMEM). The branch he headed comprised directorates of technical services, aircraft maintenance, signals and armament, with aeronautical inspection later added. To ensure that the post-war RAAF retained a capability to continue meeting its technical requirements, the reduced training facilities still aimed to provide the range of skills which such a service would surely need. In November 1945, No. 1 Signals School ceased operating at Point Cook and moved to Ballarat where it formed the basis of a new Air and Ground Radio School. In January 1946 the Engineering School at Ascot Vale (which had by now absorbed all technical training functions apart from signals) sent a nucleus of its staff to Wagga Wagga to establish what became known from March that year as the RAAF Ground Training School.



With the outcome of the Second World War more or less certain more than a year before the conflict actually ended, planning for a post war RAAF was well advanced by the time that moment finally came. In planning the size of the post-war RAAF, the Chief of the Air Staff (CAS), Air Vice-Marshal

G. Jones, originally reportedly recommended to the government a service of about 72,000 personnel but had been obliged to progressively modify this figure down to 59,000 and then 34,000 with the target to be attained by June 1946. With the shape of Australia's post-war defence forces still a matter of much uncertainty, this figure was reduced still further at government direction and in January 1946 was down to only 20,000. In fact, the RAAF's strength continued to plummet and at the end of October 1946 stood at just 13,000, by mid-1947 the number was down to around 11,600, and by the end of the following year stood at less than 7,900, barely double the service's strength on the outbreak of war nine years before, as it turned out, a disastrous situation with the Korean war only 2 years off. So serious was the shortfall situation that by February 1949 the RAAF was prompted to attempt the recruitment of 1000 ex-RAF electrical and engineering fitters, instrument makers, radar mechanics and





carpenters in Britain. Many of the trades included in this drive were, of course, precisely those which the apprenticeship scheme was ultimately intended to fill.

In addition to focusing on the issues of size and shape, RAAF planners were also prompted to consider what other elements would be necessary to sustain the future structure of the permanent service. The wartime arrangement regarding the hastily assembled Engineering Schools was finally formalised into a fully-fledged Technical Branch, based on a structure already put in place by the RAF. In 1947, after commissioning a committee to report on the feasibility of forming such a branch, the AMEM (still Wackett, now holding the temporary rank of air vice-marshal) directed the preparation of proposals that he could present to his Air Board colleagues. The scheme was approved by the Board in August 1947 and implemented in September the following year. Suggestions were also put forward to introduce an apprenticeship scheme to train young airmen to serve in technical ground trades.

Not only had the rapid demobilisation robbed the service of the bulk of its trades personnel, but it was also abundantly clear that with a heavy phase of post-war reconstruction about to get underway the RAAF would find itself competing fiercely with industry for people who were both the most suitably qualified and the best able to absorb the pace of technological advances which had occurred during the war. And this was a contest in which civil industry would be able to offer wage levels which the RAAF could not match. To combat this, it was recommended that the RAAF create its own Training College to conduct apprentice training 'on the lines of that carried out in the RAF' particularly as it was noted that Britain was returning its scheme to its previous shape and duration after the disruptions of the war years.

An in-depth study of the RAF scheme which had been established at RAF Halton (below) greatly assisted the RAAF in formulating the policy and training programme for its own project. One of the ticklish problems which was overcome by this study was the introduction of a curriculum, which would get the results without overworking the lads.



The basic plan devised was consequently built around four main objectives:

- to place RAAF technical training on a sound basis;
- to provide the RAAF with the most highly trained and qualified technicians;
- to provide an exceptionally sound basis on which to recruit the best type of youth; and
- to provide each successful apprentice with the necessary qualification for future employment on discharge from the Service.



In essence, the scheme espoused to the Australian Air Board proposed that there should be up to 940 'boy candidates' aged 15-16 years under training at any one time, who would undertake courses over three years which would fit them to become skilled tradesmen and ultimately senior NCOs. The scope of the scheme covered both engineering and electrical trades. The preferred location for the training of engineering apprentices was Forest Hill, the base at Wagga Wagga, New South Wales while the radio trades would receive their training at civilian technical colleges and the Air and Ground Radio School at Ballarat.

The final plan spelt out that on completion of three years training, each apprentice would be required to serve another twelve years in the permanent air force, instead of 18 as was originally envisaged. Moreover, the output from the scheme was intended to fill only 60 per cent of the RAAF's higher trade musters, the remainder coming from direct entry tradesmen and airmen who would undergo conversion courses in the service. During their training, apprentices would be accommodated and receive their meals separately to other airmen. They would also receive their uniform and equipment free of charge, along with their medical and dental care and rail travel home during bi-annual leave periods. They would be paid, but their spending would be subject to limits set by the commandant of the training school. This was in line with the notion that the RAAF would assume 'the normal responsibilities of Guardians in providing for apprentices' social, spiritual and recreational welfare', a function which specifically meant that they were to be denied access to intoxicating liquor.

On the 02<sup>nd</sup> Feb 1948, the first group of 53 youths aged 15-17 who had been selected for engineering training under the RAAF's new apprenticeship scheme entered the Ground Training School at Forest Hill. Five days later, a group of 16 youths similarly joined a separate Radio Apprentice School (RAS) established at the former wartime RAAF establishment at 'Frognall', in the Melbourne suburb of Canterbury. Recruitment of a second intake of apprentices began almost immediately, leading to another 84 joining at Wagga and 18 at RAS by the end of July. When the apprenticeship scheme ended 45 years later, a total of 6151 tradesmen and technical specialists had graduated into the RAAF. It should be noted that the RAAF was not alone among Australia's armed services in adopting apprentice training to meet its needs for skilled tradesmen, merely the first to do so.



Although the two separate apprentice groups were open to candidates, ie: radio and engineering trades, a candidate could apply for entry into either of these groups but on entry he would not be allocated to a particular trade within such group and no guarantee could be given that he would be trained in the trade of his first choice. Allocation to trades was made later after apprentices had shown, by the results obtained during their training, the trade for which they possessed the most aptitude. Wherever practicable apprentices were permitted to make their



own choice, but the final allocation to a particular trade depended upon the number of vacancies in that trade and the relative technical aptitude of the apprentice concerned.

Apprentice Trades in the R.A.A.F. as at 1<sup>st</sup> January, 1948.

- Fitter (Engine).
- Fitter (Airframe).
- Electrical Fitter.
- Fitter (Armourer).
- Fitter (Driver Motor Transport).
- Instrument Maker.
- Radio Fitter (Air).
- Radio Fitter (Ground).
- Telegraphist Mechanic.

In February 1960 the first batch of nine teenage members of the Royal New Zealand Air Force (RNZAF) arrived in Australia to begin apprentice training. This followed a change of policy by the New Zealand government under which RNZAF apprentices had previously been trained in Britain with the RAF. Two members of the group went to the Radio Apprentice School, while the other seven went to Forest Hill. The Kiwis remained a feature of Wagga's apprentice population until 34 Intake (Eels) graduated in 1981.

A girl phoned me and said, 'Come on over. There's nobody home.'  
I went over. She was right, there was nobody home!

On Monday 18th Jan. 1960 a bunch of young blokes descended on Wagga to start 3 years study, on what was to be called, 14 Apprentice Course – or Tulips as they became known.





Then finally, on Friday the 14th Dec. 1962, after cleaning and whitening the belt and gaiters, washing and ironing the creases into the drabs, spit polishing the boots, cleaning the rifle, a hair-cut, a shower, most now shaving, it was onto the Parade Ground for the last time for their pass out parade.

They left Wagga a few days later, some as Airframe fitters, some as Electrical fitters, others Armament fitters, Instrument fitters, Engine fitters, some with tickets in the Motor Transport trade and most, if not all, happy to see the last of Wagga and get into the Real Air Force!



***Electrical Class-rooms***



***Engine Class-rooms***



***Wagga HQ Building.***

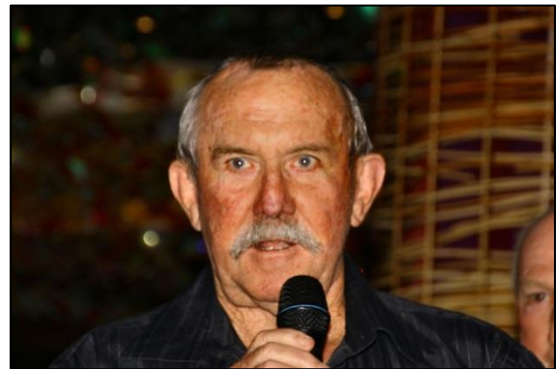




53 years after that parade, on the 17<sup>th</sup> June, a goodly bunch of old (but not withered) Tulips decided to get together at the Caloundra RSL to relive those momentous moments. Bob McInnes, the President of the Services Club and an old RAAF bloke himself (below), welcomed the Tulips to the Club and thanked them for choosing the Club for their function.

*(You can click a lot of these pics for a better copy which you can print and/or download)*

Some of those 100 plus people who made the effort included (all names left to right):



Anne and John Graham.





Jenny Wattus.

Pat Horgan, (below) the President of the Caloundra Sub-Branch of the RSL, also welcomed everyone to the Club and wished them a happy and enjoyable evening.





# THE RAM

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Claudia Moffatt, Bob Cottrell.



Col Selman, Wendy Selman, Betty Gee, Pam Bauchop, Graeme Bauchop.



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Des and Val Blagg.



Glenys Johns, Mary Russell, Maree Lewis, Gloria Rae.



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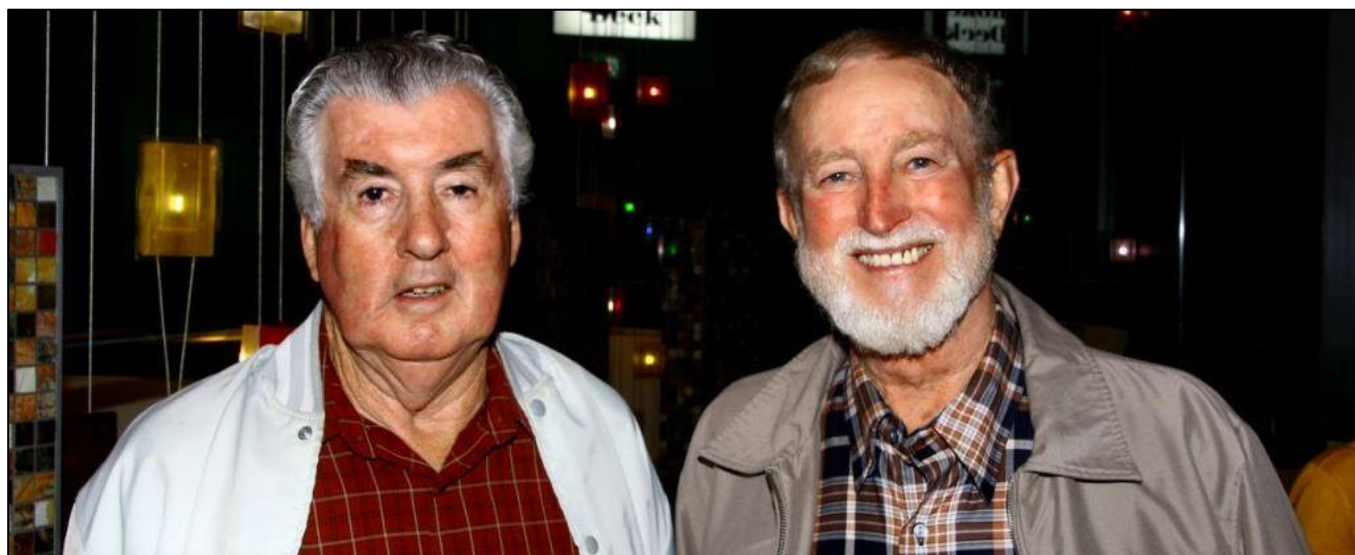


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John Cecchin, Margaret Inch.



John McDougall, Jon Fitzpatrick.



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Lesley Johnson, Cheryl Rees.



Maree Magner, Bernadette Tubman, Elaine Mattiazzi.



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Margaret Clarkson, Judy Cottrell.



Margaret Inch, Trish Erhardt, Pat Carpenter, Jill Seward, Noela Morrisson.



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Mick Magner.





Nick Winter, Bob McInnes, Geoff "Dags" Dorward.



Rick Nielson, Alwyn "Lofty" Russell.

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**Standing:** Meg Sanderson. Margaret Taylor, Digby Moffatt.

My wife likes to talk to me during sex; last night she called me from a hotel.



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Sue McDougall, Pam Weller, Joy Everett.



John Seward, John McDougall, Mick Magner.



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All the troops settled in for the odd drink or two, but with nowhere near the exuberance they would have done 20 years earlier. Age seems to do that, the older you get the more you eat but the less you drink.



Quietly having dinner, no-one jumping on tables, tossing bread at each other, sculling schooners, shouting or wrestling – age does that for you!!



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## Allan George's Gems

### The F-35.

A lot has been written about the F-35A Lightning II, the aircraft the RAAF has chosen for Australia's future air combat and strike needs. The RAAF has 75 on order (with an option on another 25) and these aircraft will be based at three operational squadrons, two at Williamtown and one at Tindal, including a training squadron at Williamtown. If the option is taken up, those additional 25 will probably go to Amberley.



What I find interesting, and perhaps even amusing, is the way the Press love to rubbish the aircraft and seem to be constantly looking for something (anything) negative to report on it. Reuters, for instance, had this blaring headline 12 months ago "**Pentagon's big budget F-35 fighter 'can't turn, can't climb, can't run'.**"

Another "We know stuff" magazine recently reported during mock dogfights over the Pacific Ocean in January this year, that a U.S. Air Force F-35 stealth fighter struggled to get a clean gun or missile shot at a 1980s-vintage F-16D. It went on, "the F-16 easily manoeuvred behind the bulky F-35, even sneaking up on the radar-evading jet when its test pilot found his rearward





view blocked by the plane's poorly-designed canopy". The obvious conclusion—America's brand-new stealth fighter, which is on track to replace almost all of the Pentagon's current fighters, is dead meat in a close air battle.

It probably can't tow a trailer of fire-wood either – but is that what it was designed to do??

The latest evaluation flight test focused on the overall effectiveness of the aircraft in performing various specified manoeuvres in a dynamic environment. This consisted of traditional Basic Fighter manoeuvres in offensive, defensive and neutral setups at altitudes ranging from 10,000 to 30,000 feet up against an "aging" F-16. The flight test pilot reported that the F-35 was "significantly less manoeuvrable" than the opposing F-16 aircraft and that the F-35 was at a "distinct energy disadvantage," especially when it came to a duel involving cannons.



Now armchair critics of the F-35 are using this report as "evidence" that the Joint Strike Fighter (JSF) is inferior to those it is intended to replace and that the trillion dollar program is a failure and that really all those people in the US Military as well as people from Air Forces in the United Kingdom, Italy, the Netherlands, Canada, Turkey, Australia, Norway and Denmark, who have all ordered the aircraft, must be stupid because the F-35 is a complete dud and everyone was suckered in by those snake oil sales people at Lockheed.

But hang on – if you can win the fight from 20 miles away, why get into a dog fight??

One single test is not enough to draw conclusions about the F-35's ability to dogfight, if that's what you want. Yes, pilots will make mistakes and there is a chance of surprise close encounters with hostile aircraft but even if it turns out that the JSF is inferior to some other aircraft in close air battles, the evidence of the past 25 years of air-to-air combat suggests that this will be a rare occurrence.

The use of guns in air combat has declined from a high of more than 60 percent of all engagements in the 1960s to around 5 percent for the last 25 years and around 90 percent of air losses since 1990 have been inflicted by missiles. The reasons for this are simple. There



are continuing improvements in sensors and missiles and aircraft connectivity is growing and there are new tactics that exploit these advances.

It would be nice if the F-35 was good at everything, but that's not realistic. So instead of dwelling on the slight chance the JSF would ever even get caught in such a close encounter, what you should consider is this.

The existing fleets of fourth-generation fighters (our F-18's) are increasingly obsolete and will be inferior to the F-35 in pretty much all future engagements. And should the F-35 ever find itself in one of these air battles, maybe the JSF wouldn't dominate in that domain but victory in future air-to-air combat will go to the side that can see first and shoot first.

This was demonstrated quite clearly in the Falklands when the slow old Harrier, so often rubbished for its poor performance, took on and defeated many modern aircraft thanks to its advance weapon technology and highly trained pilots. The critics of the F35 focus on its allegedly "inferior" performance, but as has been proven many times before, it's the weapons and sensors that tip the balance, not the airframe. The old Harrier, despite its limited airframe was an outstanding weapon during the 90's, due to its excellent radar/missile combination.



Make no mistake, the F-35A will provide Australia with a fifth generation aircraft at the forefront of air combat technology. Its low profile design, internal weapons and fuel carriage, advanced radar, electro-optical and infrared sensors with advanced voice and data link communications and the ability to employ a wide range of air-to-surface and air-to-air weapons will make it an aircraft to be reckoned with.

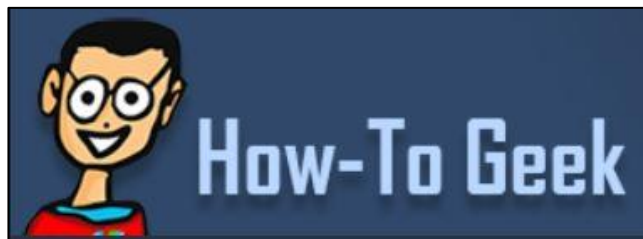


*'We're on the brink of extinction and you have a headache?'*





## 12 of the Biggest PC Myths that just won't Die



Computers are like anything else. Myths and urban legends have built up over time, passed from person to person. Some myths once had a grain of truth, but are no longer true thanks to technological progress.

A few myths are simple misunderstandings, while others exist to help people make money from you.

### 1. Hackers are Trying to Hack your PC.

Yes, it's a dangerous Internet full of malware and social engineering schemes out there, but the Hollywood fantasy of a "hacker" actively trying to compromise your PC just isn't accurate at all. Attacks are automated. Your computer could get malware that attempts to log your keystrokes and steal your personal information and you probably will get the occasional phishing email trying to get your credit card number, bank details, or social security number. But there's no "hacker" out there typing at a terminal screen, probing for holes in your PC. If something is probing for holes in your PC, it's probably a botnet probing for open security holes on unpatched computers.



Unless you're a high-value target, at a big business or government agency, there are no hackers out there attempting targeted hacks on your computer. Attackers take the shotgun approach.

### 2. There are "Clean" Windows Freeware Download Websites.

The Windows freeware download scene is bad and getting worse. Remember when uTorrent was a great program well-respected by geeks? Well, they've bundled software that maxes out your PC's CPU to mine BitCoin. All freeware download sites are bad these days. Big download sites like Download.com, Softpedia, FileHippo, and SourceForge often add their own garbage to the freeware they offer for download. These sites would have nothing to offer if they refused to offer programs bundled with junk



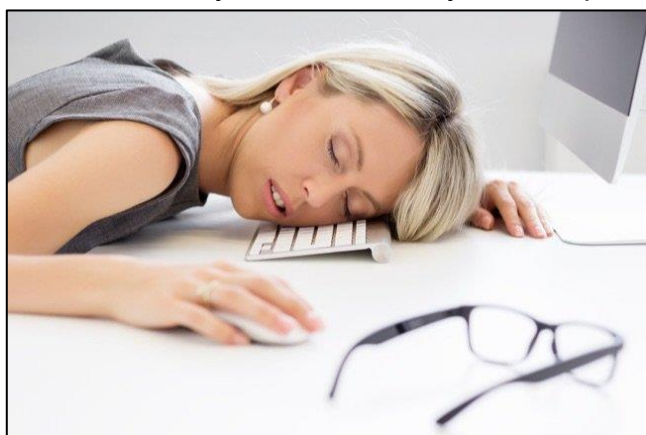


software. If you're downloading from a program's official website, you'll often have junkware pushed onto you in the installer too.

### 3. You have to Turn Your Computer Off at night.

Shutting down your computer isn't something you should regularly have to do, assuming you're using a computer made at any point in the last decade. No, you don't want your computer running at full-tilt all night but putting it to sleep makes it use almost no power and it'll be ready to go immediately when you turn it on. On a typical laptop, just closing the lid should make it sleep. Even powerful desktop PCs can use low-power sleep and hibernate modes.

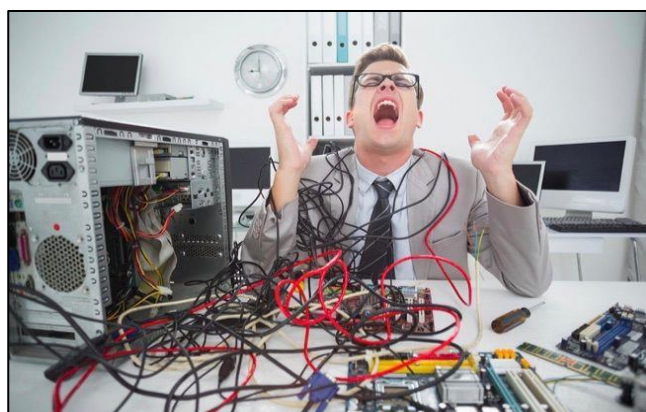
Computers can be set to automatically hibernate after a while and they'll use no power in this mode, but all your open applications and work will be ready when you sit down at your computer again. Going through a full shutdown every night and restart the next day isn't necessary at all and just wastes your time. You might want to reboot occasionally, but you don't need to shut down every day.



### 4. Automatic Updates will always Break Your PC.

Automatic updates aren't as scary as they seem. Some people go out of their way to disable Windows updates and even browser updates because they're worried about things "breaking." Yes, sometimes Windows updates do break things but, overall, automatic updates are good. They close security holes and keep your computer working properly. Breakages are rare. Security holes are a bigger concern, it's usually best to just enable automatic updates for your operating system, web browser, plug-ins, and other software and have them stay up-to-date automatically.

If you don't trust a company to responsibly install automatic updates, you probably shouldn't be running their software in the first place. On Windows 8 and 10, automatic updates no longer force reboots of your PC and are generally less obnoxious. You can also prevent Windows 7 from automatically rebooting to install automatic updates with a quick registry hack.



If you know your way around the Registry and you want to do that, see Sam's story in this Volume [HERE](#).





### 5. Internet Explorer is Slow, Vulnerable, Non-Standard, and Bad.

Among geeks in the know, Internet Explorer is a joke. Microsoft is even replacing Internet Explorer with a new browser named Edge in Windows 10 to get away from Internet Explorer's reputation but recent versions of Internet Explorer are actually pretty good. Internet Explorer 9 improved things dramatically, and IE 10 and 11 are even better. Modern versions of Internet Explorer support a lot of the modern HTML standards found in other browsers and have speedy JavaScript engines. Internet Explorer also has a "protected mode" sandbox and a multi-process design, two important features Mozilla Firefox still doesn't offer. Some tests have even found that Internet Explorer is easier on a Windows laptop's battery than Chrome, Firefox, and Opera.



We're not saying you necessarily need to use Internet Explorer but it isn't the laughing stock it used to be.

### 6. In-Use Memory is Bad.

Modern operating systems try to use as much of your computer's RAM as possible. This is true for everything from Windows, Linux, and Mac OS X to Android and Apple's iOS. Modern web browsers also use quite a bit of memory. This is a good thing! When data is in RAM, your computer can access it more quickly. It makes sense to leave applications, data, temporary files, and everything else in RAM where it can speed up access times in the future. Crucially, empty RAM is entirely useless. If your computer does need more RAM for something, it can instantly purge some of that cached data from your RAM to free up space. If you look at your resource usage and see high RAM usage, that's probably a good thing, as long as your computer or device is performing well.



You certainly don't want to use a "memory optimizer" or "RAM booster" on Windows, or a "task killer" on Android. These applications purge cached data your RAM, making it look more empty but slowing down your computer.

### 7. Manual Defragmentation and Expensive Defragmentation Utilities Help.

Here's what you need to know about defragmenting a modern computer - Don't worry about it. Windows contains a built-in defragmentation utility that it automatically runs on a schedule. You



shouldn't need to open it and run it — it'll all happen automatically. Maybe, if you install a very large PC game and need maximum performance, you might want to run a manual defragmentation right after the installation but that's a rare occurrence and you don't need to run manual defragmentation processes regularly. For example, Steam has a feature that will defragment a single PC game's files only, you could just use that.



Third-party defragmentation utilities just aren't worth paying for.

### 8. Codecs are required to Watch Videos Online.

There was a time when you needed codecs to watch videos online. RealPlayer, QuickTime, Windows Media Player, and DivX were all often necessary. Sometimes Java was used for videos and later came Microsoft's Silverlight. Nowadays, most videos should play with either the HTML5 video feature in your browser or the Adobe Flash plug-in. A few websites may still be using Microsoft Silverlight but you don't need to install codecs to watch videos on the web.



If you do click a link on social media or another website and are asked to install codecs, don't, it's a trick to get you to install junk you don't want on your computer. If you're told you need to download codecs to watch a downloaded file, don't do that either, just get VLC, possibly the best video player available today, and it's free. Be sure you get VLC from the official site at [videolan.org](http://videolan.org), not other websites that bundle it with garbage.

### 9. Viruses and Malware are why Your Computer is Broken.

Is your computer not performing well? "It must have a virus," some people think but this isn't really true. In fact, modern malware is so profit-driven that you might not even notice a performance change if you have a keylogger running in the background. Sure, it's possible that your computer is infected by malware and is using its resources on behalf of a botnet, mining BitCoin and participating in DDoS attacks against legitimate websites but viruses aren't usually what slows down a computer. Perhaps you have too many programs running at startup or your browser is loaded down with unnecessary add-ons, or there may be an actual hardware problem, it's not just a mysterious "virus" that makes your computer slow and sick.

Did you hear about the Buddhist who refused Novocain during a root canal?  
His goal: Transcendental medication.





### 10. Your Antivirus will always Protect You.

Most people understand that antivirus software isn't perfect, nothing can function perfectly 100 percent of the time, but many people seem to think that antivirus software is pretty effective. The truth is scarier. Antivirus software is a helpful last line of defence but it's nothing you should rely on completely. Even Symantec, makers of Norton Antivirus, have said that antivirus software fails to stop most cyberattacks.



Worse yet, most antivirus software doesn't even protect you against obnoxious software you don't want. Antivirus software allows obnoxious adware and spyware that inserts itself into your web browser, forcing you to use worse search engines and pushing additional advertisements onto you. And to make things worse, some free antivirus programs usually bundle this junkware. This doesn't mean the sky is falling, and it doesn't mean you should abandon antivirus completely but antivirus should be your last line of defence behind other security precautions.

### 11. Clearing your Cache will Speed-up your PC.

Some applications store cache files, which are offline copies of files they've already downloaded. They hold onto these files in case they need them again, so they can be accessed from your hard drive instead of re-downloaded. This saves time and bandwidth. Your web browser has its own cache full of bits of downloaded web pages, scripts, images, and more. Tools like CCleaner will wipe this cache to free up space, but that's not necessarily a good idea. Regularly clearing away this cache means your browser has to re-download everything every time you use it, it will actually slow down your web browsing. You do save a bit of disk space, but that space fills right back up again with more cache files.



### 12. PC Cleaners, Registry Cleaners, Driver Updaters and Paid Uninstallers are Helpful.

All those Windows system tools you see advertised around the web just aren't necessary. PC cleaners are usually scammy, promising to dramatically improve your computer and finding all sorts of "issues" with your PC if you run them in free mode. PC cleaners might be able to delete some temporary files and free up space, but you can just do that with CCleaner or Windows



Disk Cleanup. Registry cleaners are similarly useless. Your registry just doesn't need to be cleaned, those extra entries in the registry are tiny and won't slow down your PC.

Never Download a Driver-Updating Utility, like PC-cleaning programs, they try to charge you money for a service you don't need. You don't always need the latest versions of drivers, except for graphics drivers, but graphics drivers usually have their own built-in updaters and you'll regularly get driver updates via Windows Update, anyway.

Paid uninstallers won't help you uninstall programs much more cleanly, either. A third-party uninstaller might help you delete a few extra tiny files or registry entries when you uninstall an application, but that has no effect at all on your computer's performance. You may rarely need an uninstaller to clean up a program that refuses to uninstall properly, but that's different.



These are all just types of fiddly system tools that exist only to take your money. Take all the money you'd put toward these utilities and buy an SSD or another real hardware upgrade for your computer, you'll get an actual performance boost. Sure, you can find free versions of many of these tools, but they'll just waste your time, with the exception of a tool that helps delete temporary files to free up space. But that's all you might need, not even a full "PC cleaner."

Of course, there are more PC myths out there. It's not just about PCs either, everything technology-related, from smartphones to other types of hardware have their own myths. We may not be throwing salt over our shoulders, but most of us probably believe at least a few myths that just aren't accurate.

## Wind turbines.

Wind turbines seem to have popped up everywhere yet the debate still rages whether they are a clean and efficient source of electrical power or an expensive useless eyesore cluttering up the landscape. The NSW Government has released [a report](#) which shows that they are 35% efficient, that is, in every hundred days they produce energy on average for 35 days. A coal fired power station is about 85% efficient, that is, in any hundred days they generate power for 85 of those days. In Australia the average wind turbine can generate from 2.0 to 3.0 MW and would cost from \$4M to \$6M of which the tax payer contributes about \$500K in subsidies. In December 2013, Australia had about 1640 turbines in operation – these attracted subsidies of about \$820M.





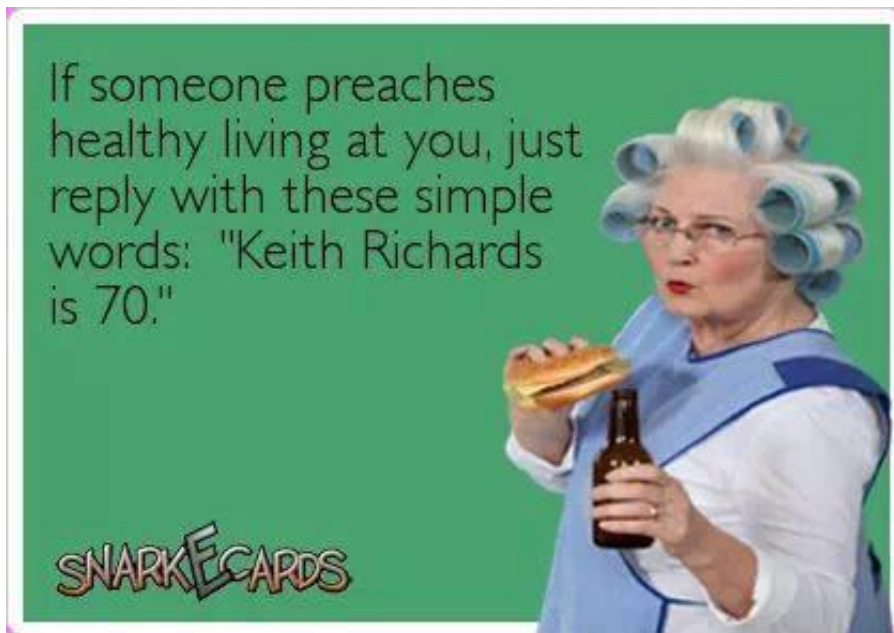


The trend in the debate these days is starting to lean towards the eyesore group. The anti-windfarm lobby is gearing up their anti-health, anti-efficient and safely campaign to combat the green and clean campaigns of the pro-windfarm group and with the [withdrawal](#) of Federal subsidies, we can see the number of new windfarms diminishing. The pro-lobby has for ages said their generators are as cost-efficient as coal or gas fired stations – without those subsidies, we shall see.

No matter on which side of the fence you sit, you have to admit those huge turbines are a mechanical marvel. Building and commissioning one is not a job for “sissies” and those without a head for heights need not apply.

Click [HERE](#) to see how it's done.

And you can click [HERE](#) to see their evolution and a description on how they operate.



## USS George Washington.

On Friday the 19th June, the nuclear powered, 88,000 metric tonne, USA aircraft carrier, USS George Washington, arrived in Brisbane for a 5 day tour. The Washington, which is 333 metres from front to back, carries a crew of 5,500 persons and has a top speed of 56 klms per hour. She is driven from 2 nuclear reactors which power 4 steam turbines, each one driving a propeller shaft. If she had the food and a crew who were willing to switch off for a while, she could stay at sea for 20-25 years without refuelling.

She was here for Exercise Talisman Saber which took place in the Coral Sea. This exercise included 21 surface ships, 3 submarines and more than 200 aircraft.



While in Brisbane, the Washington tied up on the southern side of the river, down near the mouth and unfortunately was not open for public inspection. People wishing to get a look at the ship were forced to drive down to Cabbage Point, on the northern side of the river, park their cars then walk a mile or so along (in some areas) muddy roads to get opposite her. And they turned out in their thousands, at 11.00am on the Sunday morning, the line of cars stretched as far as you could see.



### USS George Washington facts:

- Commissioned: 4<sup>th</sup> July, 1992.
- Propulsion: Two nuclear reactors that permit the ship to steam for almost 18 years before refuelling.
- Meals served daily: 18,000.
- Number of compartments and spaces: 3,360.
- Number of telephones: 2,000.
- Capacity of air conditioning system: 3,267 tonnes.
- Daily capacity of fresh water distilling plants: 1.5 million litres, enough to supply 2,000 homes.
- Aircraft carried: 90 fixed wing and helicopters.







## F35 Tailor Made Helmets .

Marking a milestone for the joint strike fighter program, Rockwell Collins recently delivered the first Generation 3 helmet for the F-35. The Generation 3 Helmet-Mounted Display System (HMDS), which was handed over to the Joint Program Office in a ceremony at the company's headquarters in Cedar Rapids, Iowa, is crucial to the F-35's advanced suite of technologies. It provides a 360-degree digital view of what's going on around the aircraft, essentially letting the pilot "look through" the cockpit floor and walls. All the information pilots need to complete their missions is projected on the helmet's visor.

Developed and built by the Rockwell Collins ESA Vision Systems joint venture, the new helmet includes an improved night vision camera, improved liquid-crystal displays and automated alignment and software upgrades, according to a company statement. The Gen 3 helmet will be introduced to the fleet in 2016.



News of the delivery marks a victory for the futuristic helmet program, which has faced challenges over the years. After a series of technical failures on the original system, the Pentagon requested that BAE Systems develop a back-up, lower-tech helmet, in case the kinks could never be worked out with the primary system. The helmet, like the aircraft itself, is also enormously expensive. The cost of each helmet, which is custom-made to fit the individual pilot, is more than \$400,000.

Rockwell Collins ESA Vision Systems also developed the Generation 2 helmet F-35 pilots currently use. The Marine Corps recently used the Gen 2 helmet to declare initial operational capability for the F-35B variant at the end of July.



**Velly Inteesting – but stupid!!!!**



## Internet Explorer.

Now that Windows 10 has hit the stores, Microsoft's Internet Explorer (IE) has been mothballed and instead the new "Edge" has taken its place. Everyone "*knows*" that it's "*common knowledge*" that almost every single geek hated Internet Explorer with a passion, but have you ever wondered why? and did they really??



Let's take a fair look at the history of Microsoft's IE and see where it all began.

We've all been so used to thinking of Internet Explorer as that slow, buggy browser that is behind the times, but it wasn't always that way—in fact, way back when things started, Internet Explorer pioneered many innovations that made the web what it is today.



Here's a quick tour through the easily forgotten history of the infamous browser:

### 1996: Internet Explorer 3

This version of the browser, introduced in 1997, was the first browser to implement CSS ([Cascading Style Sheets](#)). In fact, it introduced many new features like Java applets and sadly, ActiveX controls.

### 1997: Internet Explorer 4

IE4 introduced a blazing fast (at the time) [rendering engine](#) as an embeddable component that could be used in other applications—this was a lot more important than people realize. This version also introduced Dynamic HTML, which allows web pages to dynamically change the page using JavaScript and added Active Desktop integration. And, it seems like nobody remembers this anymore, but IE4 was actually cross-platform—you could install it on Mac OS,



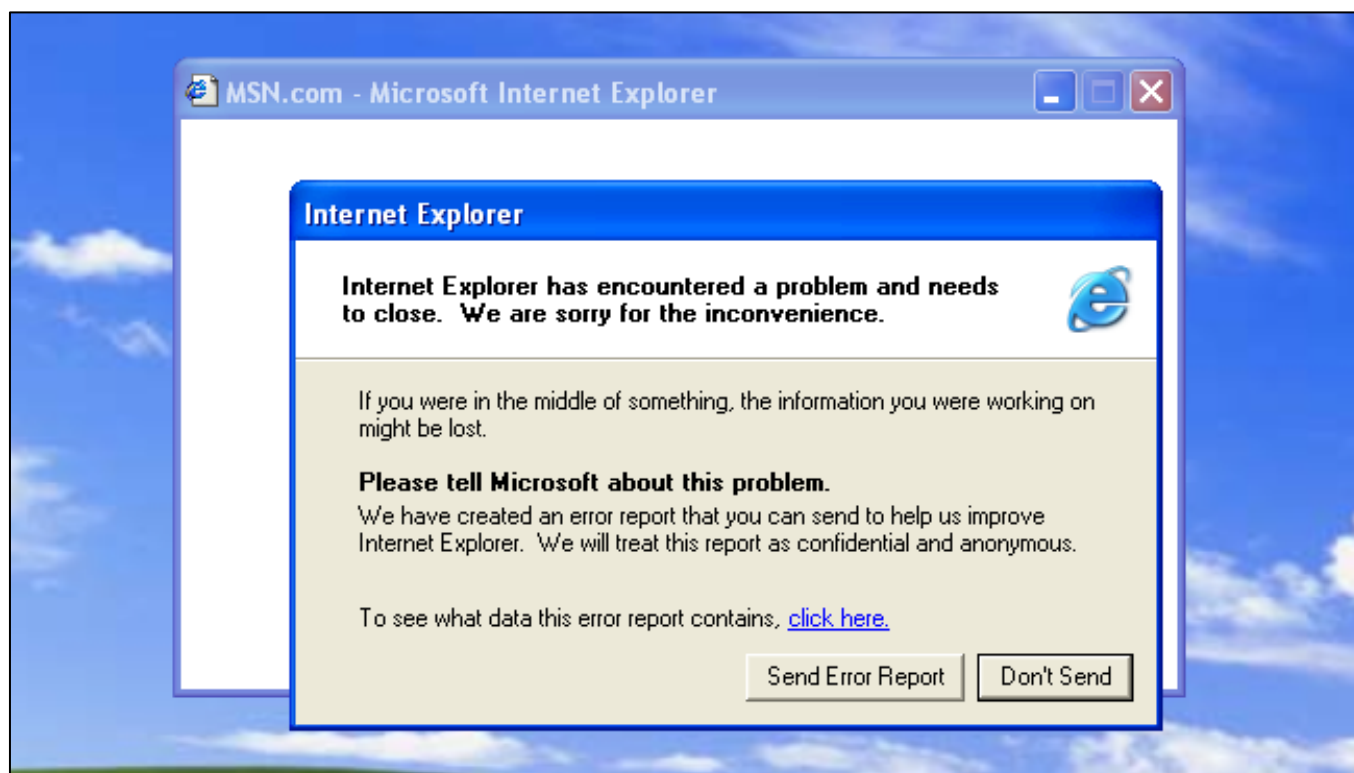


Solaris, and HP-UX—and by the time IE5 was released, IE4 had reached a 60 percent market share.

## 1999: Internet Explorer 5.x

Microsoft invented Ajax. It was this version of IE that introduced the XMLHttpRequest feature in JavaScript, which forms the underlying technology behind every web application you're using today—you know, like Gmail. Of course, the term “Ajax” wasn't actually coined until years later by somebody other than Microsoft, but this release supported everything required to make it work. From IE3 until IE6, Microsoft used all their resources to simply out-innovate the competition, releasing new features and better browsers faster than Netscape. In fact, Netscape 3 Gold was a piece of junk that crashed all the time, and Netscape 4 was extremely slow and could barely render tables—much less CSS, which would often cause the browser to crash. To put it in context: web developers used to complain about Netscape the same way they complain about IE now.

What made it go so very wrong?



The trouble all started when Microsoft integrated IE into Windows as a required component and made it difficult to uninstall and use an alternate browser. Then there was the whole business



with MS exploiting their monopoly to try and push Netscape out of the market and a lot of people started to view Microsoft as the evil empire.

By the time MS released IE 6 in 2001, complete with lots of new features for web developers, and since there was no real competition and they had a 95 percent market share, they just stopped trying, they did nothing for five years even after Firefox was released and geeks started migrating left and right.

The whole problem with MS's innovation is that much of it was done in ways that didn't follow the web standards, this wasn't as big of a problem when Internet Explorer was the only game in town but once Firefox and [Webkit](#) came around and started following the standards correctly, suddenly it became a huge problem for web developers and since MS decided they didn't need to try anymore and they didn't keep up with the competition from Firefox and other browsers, bugs and security holes just cropped up left and right—really terrible ones, too. For instance, this code is all that is required to crash IE6:



```
<script>for(x in document.write){document.write(x);}</script>
```

## **IE7 and IE8 were too little, too late.**

It took five years after IE6 for MS to finally get around to releasing IE7, which added tabs and made the browser slightly more tolerable, but for web designers it was still a nightmare to deal with, and only complicated the issue since now you had to make pages render correctly in two lousy browsers instead of just one. It took another 2.5 years for MS to finally release IE 8, which greatly improved CSS support for web developers, and added new features like Private browsing, tab isolation to prevent one bad page from taking down the whole browser, and phishing protection. By this point, most geeks had already moved on to Firefox, and some to Google Chrome.

But here's the real reason geeks hate IE

Supporting IE was like a fork in the eye for Web Developers. Some years back they would spend hours making sure that their page looked great and then test it in Google Chrome, Firefox, Safari, and even Opera. It looked great, awesome! Now when it's opened in IE, the page looked like somebody had put it into a blender and hit the whip button. They then spend double the amount of time trying to fix it to look tolerable in IE6 and IE7, cursing loudly the entire time.



Thankfully by 2014, IE 6 and 7 were a statistical anomaly in actual Internet usage, and most of the bigger websites have completely stopped supporting them. When released, IE 8 usage dropped to single-digit percentages for many websites as a consequence of past experiences.

Now for the good news: The future is brighter for IE.

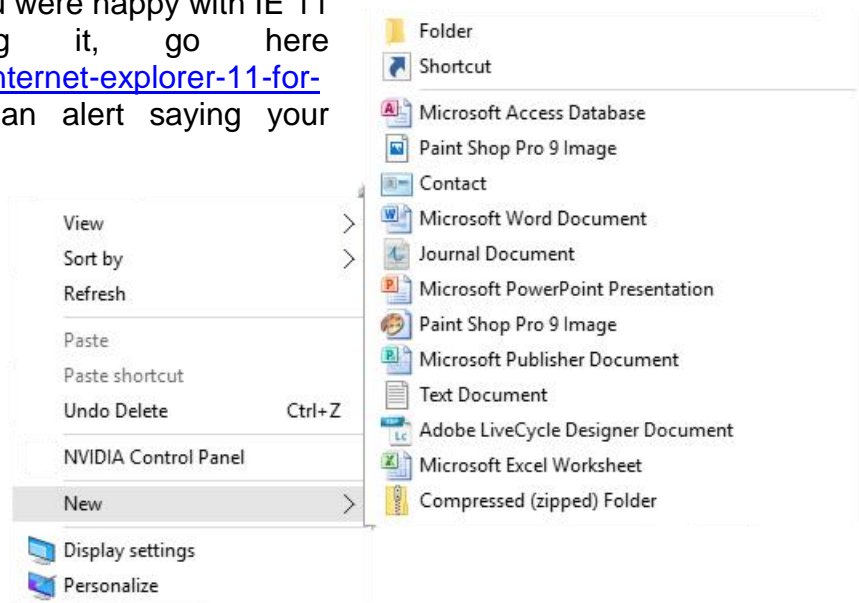
Thankfully, it seems that MS has finally learned from their many, many mistakes in the browser world. IE 10 and 11 were blazing fast, mostly standards-compliant, and other than the outdated user interface that really needed some love, are a solid choice for anybody. If you're happy with Windows 7 or 8.1, there is now no reason not to use IE 11 as it is very good, in fact, the new MS browser, Edge still has a way to go before it will be as good as IE 11, so you would be better off staying with the old and true



To say that Edge is a little rough around the edges is an understatement – many things just don't work and although it is completely usable as a browser, it still lacks some features. What you don't get yet is its support for extensions, this will come but you could have to wait for a little while.


If you've upgraded to Windows 10, you would already have Edge on your machine, but that doesn't mean you can't still use IE 11. If you were happy with IE 11 and want to continuing using it, go here <http://www.microsoft.com/en-us/download/internet-explorer-11-for-windows-7-details.aspx>. You might get an alert saying your machine is not compatible with IE 11, if so, disregard that and click Internet Explorer 11 (then either 32 or 64 bit – depending on your machine), then click the **DOWNLOAD** button. Follow the prompts and install it. Once it's installed, navigate back to your desktop, then **right** click a blank spot on your desktop, that will open another window (right), click **NEW** down the bottom, that opens another window, click **SHORTCUT**.

In the new window that opens, click





Browse, then navigate to **C:\Program Files (x86)\Internet Explorer**. Scroll down and highlight **ieexplore.exe** then click OK. Click NEXT. You will be asked for a name – type in **Internet Explorer** then click Finish.

This will put the familiar blue  back on your desktop and you can use Internet Explorer 11 again.

A man walked into a bar on a slow night and sat down. After a few minutes, the bartender asked him if he wanted a drink. He replied, "No thanks. I don't drink. I tried it once, but I didn't like it." So the bartender said, "Well, would you like a cigarette?" But the man said, "No thanks. I don't smoke. I tried it once, but I didn't like it." The bartender asked him if he'd like to play a game of pool, and again the man said, "No thanks. I don't like pool. I tried it once, but I didn't like it. As a matter of fact, I wouldn't be here at all, but I'm waiting for my son."

The bartender said, "He is your only child, I'm guessing."

## Tacan Cancers.

About 10 years ago, retired WOFF Tony Pitt, RADTECHG, advised contacts that he had a host of rare cancers – 18 in fact – that he believed were caused by the SAL-219 Klystron that was the power tube in RTN-2 TACAN. The klystron operated at 25,500 volts. Tony learned that the tube emitted x-rays after about 1,000 hours of operation.

About sometime in late 1970 or early 1971 techs working on TACAN at Mt Louisa, Townsville, had to wear film badges for a period. It was rumoured they received a years' worth of radiation in a week but never any more was said. Apparently, this test arose after a RADTECHG in Darwin was found to have radiation burns from working on TACAN. A lead-shield was apparently placed over the klystron. Later, another tech in Pearce received radiation burns after he had removed the lead shield to tune the klystron. A tech at Laverton was said to be getting terrible headaches for a few days when he worked on TACAN with a colleague.



Tony retired in 1978 and died on the 22 Sept 2008. DVA never accepted his cancers were service related. His wife's war widow's pension apparently came as a result of Tony returning from Ubon, Thailand, circa 1960 with a sunspot on his lip! Another colleague and a former





apprentice course-mate who worked on TACAN for many years (and who disagreed with Tony) died several years later from an extremely rare liver cancer.

If you were a groundy and worked on the Tacan – get yourself checked!!!

## Defence Exposure Evaluation Scheme (DEES).

In April this year the Department of Defence released the Jet Fuel Exposure Syndrome (JFES) Study into the effects of jet fuel and solvents on the health of former F-111 Deseal/Reseal Defence personnel. The (then) Chief of Air Force, Air Marshal Geoff Brown AO, met with F-111 Deseal/Reseal and fire-fighter representatives of those who participated in the study to discuss the report and their health concerns.

“It is important that Air Force provides the most up-to-date health information to our current and former workforce, on the effects of occupational exposure to jet fuel,” Air Marshal Brown said. “Our people are our most important asset and I will continue to implement practical measures, such as safe work processes and the use of protective equipment, to minimise exposure to JP8 jet fuel. It is important to me that our personnel both past and present, have access to this independent research.

Defence’s Senior Physician in Occupational and Environmental Medicine, Doctor Ian Gardner explained that the study utilised the latest university and medical research technologies into molecular and genetic aspects of cell biology. The study found small but persistent cellular effects many years after exposure. “The study found that while the kerosene component of jet fuel could adversely affect cells, the damage to cellular function is not expected to have immediate or adverse health effects,” Dr Gardner explained.

The study did not find any evidence of genetic or chromosomal damage in cells exposed to jet fuel or the deseal/reseal solvents. Dr Gardner explained that a positive finding was that there is





no evidence found for the Jet Fuel to cause genetic or chromosomal damage that could lead to cancers.

"DVA and Defence are continuing to work on studies such as the 4th Update to the F-111 Mortality and Cancer Incidence Study and the ADF Firefighter Study which are being finalised," Dr Gardner said.

The \$3 million JFES study was undertaken by researchers at the Mater Medical Research Institute in Brisbane led by Prof Frank Bowling. The JFES Study resulted from initial research work undertaken by Air Force personnel.

The JFES study, and a summary can be downloaded at [HERE](#) and there is an excellent Power Point presentation available [HERE](#). It's a big file and will take a few seconds to download.

John was on his deathbed and gasped pitifully, "Give me one last request, dear," he said. "Of course, John," his wife said softly. "Six months after I die," he said, "I want you to marry Bob.." "But I thought you hated Bob," she said. With his last breath John said, "I do!"

## Supermarine Spitfires and Hawker Hurricanes:

Which was the better aircraft??

Which is better, the Supermarine Spitfire or the Hawker Hurricane? That question has been asked by pilots, historians and air enthusiasts since 1940. It does not have a definitive answer, however, each aircraft had its strong points and its disadvantages. Although both aircraft played a decisive role in the Battle of Britain they could not have been more different from one another. Each was created under a completely different set of circumstances and came from totally different backgrounds and antecedents. The Spitfire owed its famous graceful lines and speed to its early ancestors, evolving as a fighter from a series of extremely successful racing seaplanes that were designed in the 1920s—and 1930s. All of those racers were built by the firm of Supermarine Ltd. and were designed by one man—Reginald J. Mitchell. The innovative Mitchell has been called one of the most brilliant designers Britain has ever produced. His designs really were

# HISTORYNET







ahead of their time. In 1925, when he began building racing airplanes, streamlining was considered more a theoretical exercise than an engineering possibility. But Mitchell made engineering theories more than just possibilities; he turned them into brilliant successes.

Mitchell's efforts at streamlining produced aircraft that were not only graceful but also among the fastest in the world. In 1927, his S.5 racer won the Schneider Trophy with a speed of 281.65 mph. Four years later, his elegant S.6B captured the Schneider Trophy outright for Britain with a speed of 340.08mph. Later, on September 29, 1931, his S.6B, fitted with a special 'Sprint' engine with its horsepower upgraded to 2,550, pushed the world speed record to 407.5 mph.

During that time, Britain's Air Ministry began looking for a replacement for the Royal Air Force's (RAF) standard fighters, the Bristol Bulldog and Gloster Gladiator, both of which were biplanes. Knowing he had the experience and the reputation he acquired by designing his Schneider Trophy winners going for him, Mitchell decided to make a bid for the Air Ministry's contract to design this new fighter. The Supermarine firm had been taken over by the industrial giant Vickers by this time; the new corporation was known as Supermarine Aviation Works (Vickers) Ltd.

The first prototype of the aircraft that would become known as the Spitfire was an odd-looking affair. Officially designated the F.7/30, it was a gull-winged monoplane with an open cockpit and spatted undercarriage. It looked more like a German Junkers Ju-87 Stuka dive bomber than the Battle of Britain fighter. Mitchell was not satisfied with his F.7/30 for a number of reasons. For one thing, it was underpowered, its Rolls-Royce Goshawk II engine gave it a speed of only 238 mph. So he began to experiment. He added a larger engine, enclosed the cockpit and gave his new fighter a retractable undercarriage with smaller, thinner wings. These thin, elliptically shaped wings would become the fighter's most recognizable feature. Mitchell continued to modify his design in 1933 and 1934. The larger engine he had in mind was supplied by Rolls-Royce, a new, 12-cylinder, liquid-cooled power plant called simply the PV-12. Rolls-Royce would rename this engine the Merlin, a name that would become legend among aircraft power plants. The new fighter, now designated the F.10/35, developed into a low-wing interceptor with retractable undercarriage, flaps, enclosed cockpit, and oxygen for the pilot. The Merlin engine promised to give it all the speed Mitchell wanted and the Air Ministry would require. For armament, he gave his fighter four wing-mounted .303-caliber machine guns. Air Vice Marshal Hugh 'Stuff' Dowding, Air Member for Supply and Research, had been in charge of the RAF's technical development since 1930. He was favourably impressed by Mitchell's F.10/35 except for one item, he wanted eight machine guns. Recent tests had shown that the minimum firepower needed to shoot down an enemy bomber was six or, preferably, eight guns, each capable of firing 1,000 rounds





per minute. With that armament, it was estimated that a pilot would need only two seconds to destroy an enemy bomber in the air, the time during which a fighter pilot would be able to keep the enemy in his sights, it was thought.

Dowding had the future in mind. He knew that the German Luftwaffe was expanding and that Adolf Hitler's ambition would probably lead to an armed conflict between Britain and Germany. His farsightedness would pay off eight years later, in 1940, when he was chief of RAF Fighter Command.

Because of his aircraft's elliptical wings, Mitchell was able to fit four Browning .303 caliber machine guns into each wing without increasing drag or radically altering the design. With that armament, along with the RollsRoyce Merlin engine and the other features he had designed, Mitchell knew that his fighter would be a match for any aircraft the Luftwaffe might produce. Now all he had to do was convince the Air Ministry.



R. J. Mitchell's masterpiece, the prototype Supermarine Spitfire.

Mitchell's fighter first took to the air on March 5, 1936. It had been given a name, the Spitfire, by Vickers and made official by the Air Ministry. (Mitchell himself did not like the name very much; he called it 'a bloody silly name.') This Spitfire was flown by J. 'Mutt' Summers, chief test pilot for Vickers and Supermarine, out of the Eastleigh airport in Hampshire. It was unarmed and fitted with a fixed-pitch wooden propeller. After landing from his test flight, Summers told his ground crew, 'I don't want anything touched.' Although some alterations would be made, he realized from just one flight that the Spitfire was an outstanding fighter.

Following some persuasive arguments from Air Vice Marshal Dowding, the Air Ministry agreed with Summers' assessment. With a maximum speed of 342 mph, the plane was classed as the fastest military aircraft in the world. Less than three months after Summers' test flight, on June





3, 1936, a contract was placed with Supermarine for 300 Spitfires. Six hundred more were ordered the next year. By the time Britain went to war with Germany on September 3, 1939, the war that Air Vice Marshal Dowding had foreseen, 2,160 Spitfires were on order for the RAF.

But R.J. Mitchell never lived to see the success of his creation. In 1937, at the age of 42, he died of cancer.

Although the Spitfire was the product of one man's imagination, the Hawker Hurricane did not owe its origins to any single individual. It was the result of an evolutionary process that began with the fabric-covered biplanes of World War I. Revolutionary for its time, it was the RAF's first monoplane fighter and its first fighter to exceed 300 mph, the Hurricane was still a wood-and-fabric airplane. It was once referred to as 'a halfway house between the old biplanes and the new Spitfires.' Sidney Camm, Hawker Aircraft's chief designer, was the leading force behind the Hurricane's development. In the early 1930s, when the Air Ministry began looking to replace its biplanes with a more modern fighter, Camm already had a design for what he called his Fury



monoplane, a modification of the graceful and highly manoeuvrable Fury biplane. The Fury was the direct descendant of Sopwith's Pup, Triplane, Camel, Dolphin and Snipe-fighters of World War I. Hawker Aircraft Ltd. had begun its life as Sopwith Ltd.

Apart from the fact that the Hurricane was a monoplane, its major differences from the Fury were its power plant and armament. The Fury was powered by the Rolls-Royce Kestrel, which gave it a maximum speed of 184 mph. But the Kestrel was much too small for the Hurricane. When Camm heard about Rolls-Royce's PV-12 engine, the Merlin, he modified his new monoplane to accommodate it.

The original armament of the new Hawker monoplane consisted of two .303-caliber Vickers Mark V machine guns mounted in the fuselage, and two .303-caliber Browning machine guns in the wings. But when Dowding decided that eight guns would be needed to destroy an enemy bomber, Camm changed his design. Just as Mitchell had done with his Spitfire, Camm incorporated eight Browning machine guns in his new fighter, four in each wing. But while Mitchell spaced the guns across the wing's leading edge, Camm grouped four guns together on each wing; this made for a tighter and more destructive concentration of fire.

When the Hawker plane made its first test flight on November 6, 1935, it was still without a name, the Air Ministry did not approve 'Hurricane,' the name suggested by the manufacturer, until June 1936. The Hurricane's maiden flight impressed the Air Ministry, but there were still some who had their doubts about such an 'unconventional' airplane, one that had eight machine guns and an enclosed cockpit. The first order of 600 Hurricanes was not placed by the Air Ministry until seven months after the initial test flight.



Enclosed cockpits, retractable landing gears and other features that would become standard for World War II era airplanes were considered too unorthodox by many authorities, even as late as the mid-to-late 1930s. High-ranking officers who had flown during World War I were accustomed to open cockpits, fixed wheels, struts and supporting cables. Wood and fabric biplanes were familiar; monocoque monoplanes were new and strange to them. And the 'old school' types had a good deal of influence in the pre-1939 RAF.

Some World War I pilots even insisted that the monoplane would always be outclassed by the biplane, because a biplane could always outmaneuver any monoplane. If those officers had had their way, the RAF would have faced the Luftwaffe's Messerschmitt Bf-109s with obsolete Gloster Gladiators in the spring and summer of 1940. It was that line of thinking that made Dowding's job of upgrading and modernizing the RAF more difficult.



The first RAF unit to be equipped with the Hawker Hurricane was No. 111 Squadron, which received its new fighters late in 1937. Production went into high gear during the following year, after the Air Ministry realized that the coming conflict was not far off. By the time war was declared, just under 500 Hurricanes had been delivered. Eighteen squadrons had been equipped.

Although it may appear from their close completion dates that the Hurricane and Spitfire were developed in parallel, the fact that they appeared on the scene at roughly the same time was purely coincidental. Work on the Spitfire design actually began several years before the Hurricane, but because it was a more complex and innovative airplane, it took longer to



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develop. Eventually, 14,000 Hurricanes would be built and 22,000 Spitfires (including Royal Navy Seafires).

During the Battle of Britain, between July and September 1940, 19 squadrons of Supermarine Spitfires (372 aircraft at peak on August 30) and 33 squadrons of Hawker Hurricanes (709 aircraft on August 30) faced the Luftwaffe from airports throughout southern England. Other fighters were also employed, such as the grossly underpowered Boulton Paul Defiant, which was no match for the Messerschmitt Bf-109 in spite of its four-gun power turret (neither was the twin-engine Bristol Blenheim). A squadron of Gloster Gladiator biplanes was actually assigned to defend the Royal Naval dockyards at Portsmouth. But the brunt of the fighting was taken on by the Spitfire and the Hurricane.

The Luftwaffe had tried to destroy the RAF, especially the RAF Fighter Command, during the Battle of Britain and had conspicuously failed. This failure was almost entirely due to the 'unconventional' creations of Reginald J. Mitchell and Sidney Camm. Dowding's insistence upon equipping the RAF with these two fighters while he was still attached to Supply and Research paid large dividends in the skies over the south of England during the summer of 1940. But the question persists as to which was better, the Hurricane or the Spitfire. Pilots have been making comparisons between the two airplanes for more than 50 years. Wing Commander Robert Stanford-Tuck said the Spitfire was like 'a fine Thoroughbred racehorse,' while the dear old Hurricane was rather like a heavy workhorse.'





‘After many years of reflection,’ said a former Spitfire pilot during the 1980s, ‘I take the view that it took both of them to win the Battle of Britain, and neither would have achieved it on its own.’

As a more stable gun platform, many have said that the Hurricane was better suited to go after the Luftwaffe bombers. For attacking formations of bombers, the Hurricane offered better visibility and much greater steadiness for shooting. The Spitfire was a slightly higher performance airplane, faster, a better rate of climb, and much more responsive to the controls, according to Stanford Tuck. In other words, each had its good points and bad points. Or, as another pilot said, ‘The Spitfire and the Hurricane complemented each other.’ A former pilot of No. 65 (Spitfire) Squadron observed that the Hurricane inflicted greater damage on the enemy bombers than did the Spitfire; but without the Spitfire squadrons to fight the Messerschmitts, the Hurricane-inflicted casualties might not have been enough to win the battle.

By 1939, the Spitfire was significantly faster and had a higher rate of climb, according to Dennis Richards and Richard Hough in *The Battle of Britain*, and they noted, ‘In handling, there was little to choose between the two.’ The authors went on to point out that the Hurricane’s twin batteries of four Brownings closely grouped together in the wings was preferred to the ‘widely scattered’ guns in the Spitfire’s wings. Squadron Leader Douglas Bader, who became an ace in spite of losing both legs in an air accident, added that the Hurricane ‘had more room in the cockpit and a better view, and the Spit’s much trickier to land ... on that little, narrow undercarriage.’



Peter Townsend, who flew both Spitfires and Hurricanes, said that Spitfires were ‘faster and more nimble, the Hurricane more manoeuvrable at its own speed and undoubtedly the better gun platform.’

One of Townsend’s fellow Battle of Britain pilots defended the Spitfire: ‘Our Spits were so well balanced they would fly themselves. Many pilots owe their lives to this property .... If a pilot passed out through lack of oxygen, the Spitfire would fall away in a dive and correct itself’ But another of Townsend’s contemporaries spoke up for the Hurricane: ‘It was built with the strength of a battleship, had an engine of great power and reliability and was throughout an excellent and accurate flying machine.’



Some of the Hurricane's detractors (or Spitfire's defenders) point to the Hawker fighter's wood-and-fabric construction as one of its failings. But author Len Deighton claimed that this 'old-fashioned' construction was actually one of the airplane's advantages. He noted that the exploding cannon shells of the Messerschmitt Bf- 109, which inflicted heavy damage to metal skin, had less effect on any sort of girder work-in the same way that bomb blasts so often failed to topple the skeletal British radar towers. He



pointed out that the RAF had very few men who understood the complexities of the Spitfire's stressed-metal construction, but that its airframe and flight mechanics had spent their lives servicing and rigging wood-and-fabric aircraft like the Hurricane. In consequence, many seriously damaged Hurricanes were repaired in squadron workshops while badly damaged Spitfires were being written off. Deighton also noted that the Hurricane had a tighter turning radius than the Spitfire, 800 feet for the Hurricane compared with 880 for the Spitfire. This meant that the Hurricane could turn inside the Spitfire, like a sports car outmanoeuvring a sedan—a vital attribute in air combat.

The Spitfire's job was to engage the enemy's fighters, to draw the Messerschmitts away from the German bomber formations. Then, when the Bf-109s were out of position, the Hurricanes would attack the bombers. That was the plan, but it didn't always work out that way. Hurricane pilots found themselves fighting Messerschmitts as often as did the Spitfire pilots.

German pilots had a great deal more respect for the Spitfire than for the Hurricane. The standard wisecrack among Luftwaffe fighter pilots was that the Hurricane was 'a nice little plane to shoot down.' But this could be attributed to Spitfire snobbery, no German fighter pilot wanted to admit that he had been badly shot up by a fighter made of fabric and wood.

Some Spitfire pilots shared that bias in regard to the Hurricane. A former pilot of No. 65 Squadron admitted that he had become slightly partisan on the relative merits of the Hurricane and the Spitfire and noted 'I would not like to have been a Hurricane pilot in 1940 and greatly respect the courage and achievements of those who were.' Among RAF pilots, the Spitfire-vs.-Hurricane





controversy went on and on, with no quarter given by either side. And the argument was not always confined to the officer's mess.

Shortly before the Battle of Britain began, a practice air raid had been arranged between a Spitfire squadron and a Hurricane squadron. The Hurricanes were to make a mock bomb run over the Kenley airfield in Surrey. Number 64 Squadron was to send six Spitfires to intercept the incoming 'bombers.' It all looked like a nice, easy practice drill on paper, but whoever planned the exercise had not reckoned on the rivalry between Spitfire and Hurricane pilots. Each side thought its own airplane was the best. Now they had their golden opportunity to demonstrate which fighter really was superior, once and for all. The exercise began according to plan—the Spitfires patrolled above their aerodrome, and the Hurricanes showed up flying in bomber formation. But when the Spitfires dove to the attack, the plan quickly fell apart. When the Hurricane pilots saw their adversaries closing from behind, they broke formation and turned to meet their attackers—a highly unbomberlike manoeuvre! For the next several minutes, the two squadrons chased each other for miles in all directions. The strain of dogfighting quickly wore down the pilots' enthusiasm and both squadrons landed after several minutes of wild aerobatics. Despite the great effort, however, nothing was accomplished by the little drill. Nobody's skills at breaking up bomber formations had improved, and neither side could brag about a clear-cut victory over the other. But at least it had given the pilots something else to argue about.



The pilot at the controls of either a Hurricane or Spitfire was not the most comfortable person in the world. Both machines may have had their good points and bad points, but no one ever praised either one for its comfort or luxury. According to Wing Commander Raymond Myles, who flew with the all-American Eagle Squadrons, a fighter pilot was a lonely man. The cockpit was so narrow that his shoulders brushed against the sides whenever he rubbernecked for enemy fighters (which was constantly); his flying helmet, with his radio headset, covered his ears; his nose and mouth were covered by an oxygen mask, which also contained his





microphone. He could not hear very well, even the engine roar was muffled; his vision was severely restricted, and his entire body was boxed in by the confines of the cockpit. He was, in short, not only lonely but also extremely uncomfortable.

In spite of their differences, it would be the combination of Hurricane and Spitfire, together that turned the tide in that summer of 1940. The pilot's disposition was not improved by the fact that he was traveling at speeds in excess of 300 mph and he felt even more anxious when a pilot in another machine, probably just as uncomfortable, began shooting at him.

Die-hard defenders of the Hurricane are quick to comment that the Hawker aircraft is credited with shooting down more enemy aircraft than the Spitfire. The Air Ministry confirmed this with its statement, 'The total number of enemy aircraft brought down by single-seater fighters was in the proportion of 3 by Hurricanes to 2 by Spitfires,' and also noted, 'the average proportion ... of serviceable [aircraft] each morning was approximately 63 percent Hurricanes and 37 percent Spitfires.' A cynic might be tempted to say that the Hurricane did most of the work, but the Spitfire got most of the glory - and the cynics would have a point. For in spite of all the facts, it is the myth that is best remembered, the myth of the Spitfire taking on the air fleets of the Luftwaffe single-handedly. In their jubilee edition of *The Battle of Britain*, Richard Hough and Denis Richards give their own version of the Spitfire myth: 'The Battle of Britain, despite Fighter Command's being down to its last few aircraft, was won by unfailingly cheerful young officers flying Spitfires ... and directed by 'Stuffy' Dowding .....



The reason for the Hurricane's second-class status was that it was competing not with another fighter, but with a genuine legend. William Green wrote: 'The Supermarine Spitfire was much more than just a highly successful fighter. It was the material symbol of final victory to the



British people in their darkest hour, and was probably the only fighter of the Second World War to achieve legendary status.'



The fact that the Hurricane was responsible for more enemy aircraft destroyed is eclipsed by the Spitfire's graceful silhouette and romantic legend. Glamour usually outshines performance, in war as in love. Both aircraft were modified many times as the war progressed; they were given larger engines, more spacious cockpits and 20mm cannons. Both also saw active service until World War II ended in August 1945.

Although they served on other fronts from Malta to Singapore, they reached their pinnacle during the high summer of 1940, when the Spitfire and Hurricane joined

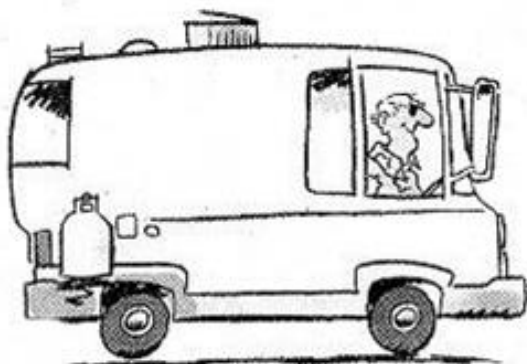
forces to thwart the Luftwaffe over the green fields of southern England.

In spite of their differences, both in origin and in performance, the two fighters became counterparts. Together, they turned the tide of history's first great air battle.





## The Wheels of Life



## Which spread is better for my heart — butter or margarine?

People become confused when faced with the choice of whether to purchase butter or margarine. Butter gets points for taste; margarine for being easy to spread. Butter is high in saturated fats and when consumed in excess amounts can increase LDL (BAD) cholesterol levels, thus increasing the risk of cardiovascular disease.



Margarine usually tops butter when it comes to heart health. Margarine is made from vegetable oils, so it contains unsaturated "good" fats — polyunsaturated and monounsaturated fats. When substituted for saturated fats, these types of fats help reduce low-density lipoprotein (LDL), or "bad," cholesterol fats which help to increase HDL (GOOD) cholesterol and potentially reduce the risk of cardiovascular disease.

Butter, on the other hand, is made from animal fat, which is why it contains more saturated fat.

Butter contains about 50% saturated fat, while margarine has a maximum of 20% saturated fat. The fat content of "light" or fat-reduced margarine is lowered by replacing some fat with protein and water, meaning many are much lower than 20%.

But not all margarines are created equal, some margarines contain trans fat. In general, the more solid the margarine, the more trans fat it contains. Trans fat, like saturated fat, increases blood cholesterol levels and the risk of heart disease and also lowers high-density lipoprotein (HDL), or "good," cholesterol levels. In the supermarket, look for a spread that doesn't have trans fats and has the least amount of saturated fat. When comparing spreads, be sure to read the Nutrition Facts panel and check the grams of saturated fat and trans fat.



To call a spread margarine, the product must be a spreadable food made of edible oils and water, containing at least 80 grams of edible oils per 100 grams. It may also include water, edible proteins, salt, lactic acid-producing microorganisms, flavour-producing microorganisms and milk products.

For a product to be called butter, it must be derived exclusively from milk and ingredients that are obtained from milk, including at least 80% milk fat. It may also contain water, salt, lactic



acid producing microorganisms and flavour-producing microorganisms. When you see products in the supermarket that are packaged up like butter, or use words such as "butter-flavoured" without specifically stating the product is butter, it's likely they have been altered in such a way that it no longer meets the content requirements above.

If you choose a full-fat spread (best for cooking), aim for less than 27 grams of saturated fat and one gram of trans fat per 100 grams. For fat-reduced spreads (best for bread and toast), aim for less than six grams of saturates and 0.2 grams of trans fat per 100 grams.

Some margarines contain added plant sterols and stanols, a type of fat found in vegetable oil, nuts, legumes, grains, cereals, wood pulp and leaves, which are able to reduce cholesterol absorption from the small intestine into the bloodstream. If you have high blood cholesterol, you may want to use such a product, though you need to consume 20 to 25 grams per day for the maximum effect.

As soon as the edible oil content of margarine drops below 80 grams per 100 grams, it cannot technically be called "margarine". This is why the word "margarine" does not appear on labels for spreads that are fat-reduced – they are called "spreads". These are the healthiest options if you are trying to reduce your total fat and kilojoule intake.

If you are trying to lower your salt intake, check the sodium column on the nutrition information panel and aim for less than 400 milligrams per 100grams.



Although the debate rages about the potency of specific fats in raising blood cholesterol, most Australians [consume too much](#) saturated fat from animal products. Saturated fat from foods and drinks gets manufactured in your body into low-density-lipoprotein (LDL) cholesterol, or commonly referred to as "bad" cholesterol, which then appears in your blood. Excess LDL cholesterol that cannot be cleared by the liver ends up lining your artery walls. This makes your blood vessels hard and inflexible and they gradually become blocked. From there, it is just a matter of time before the blockage triggers a heart attack or stroke.

Saturated fat is a solid at room temperature and is the predominate fat found in the white fat in meat and dairy products, including milk, cheese, cream and butter.

### What to look for:

Choose margarines that are low in saturated fats and high in polyunsaturated and monounsaturated fats.



### **What to avoid:**

Avoid trans fats – always look for margarines with the lowest levels of trans fats. Trans fats are ‘bad fats’ that raise LDL cholesterol levels in the blood. They can be created during the manufacturing of some table margarines. Check the labels of all margarines you buy, to make sure they contain less than 1% trans fat.

### **Plant Sterols:**

Plant sterols have been shown to lower cholesterol by 10%, through a mechanism in which they block the body's ability to absorb cholesterol. In order to maximise the benefit obtained from plant sterols, 2-3g should be consumed daily. This corresponds to 1-1½ tablespoons of plant based sterol margarine. Consuming more than this amount will confer no additional benefit with regard to an effect on lowering cholesterol. So too, if less than this amount is consumed, no benefit will result.

For best results, plant sterols should be consumed in conjunction with a healthy diet that is balanced with physical activity.

## **Does grass-fed beef have any heart-health benefits that other types of beef don't?**

The way cows are fed can have a major effect on the nutrient composition of the beef. Whereas cattle today are often fed grains, the animals we ate throughout evolution roamed free and ate grass. Many studies have shown that the nutrients in beef can vary depending on what the cows eat. It's not only important what we eat. It also matters what the foods that we eat, ate.

### **The difference between grass-fed and grain-fed cows.**

Most cows start out living similar lives. The calves are born in the spring, drink milk from their mothers and are then allowed to roam free and eat grass, shrubs or whatever edible plants they find in their environment. This continues for about 6 to 12 months. After that, the “conventionally” raised cows are moved to feedlots.



There, the cows are rapidly fattened up with grain-based feeds, usually made with a base of soy or corn. The conventionally raised cows are often given drugs and hormones to grow faster, as well as antibiotics to survive the unsanitary living conditions. The cows live there for a





few months and are then moved into the factory for slaughtering. Compare that to grass-fed cows, which may continue to live on grassland for the remainder of their lives. Of course, this isn't really that simple and the different feeding practices are complicated and varied. The term "grass-fed" isn't even clearly defined but generally speaking, grass-fed cows eat (mostly) grass, while grain-fed cows eat (mostly) an unnatural diet based on corn and soy during the latter part of their lives.

Grass-fed beef may have some heart-health benefits that other types of beef don't have. When compared with other types of beef, grass-fed beef may have:

- Less total fat
- More heart-healthy omega-3 fatty acids
- More conjugated linoleic acid, a type of fat that's thought to reduce heart disease and cancer risks
- More antioxidant vitamins, such as vitamin E

Lean beef that's 10 percent fat or less, whether it's grass-fed beef or another type of beef, can be part of a heart-healthy diet. Although many people think grass-fed beef tastes better, it's generally more expensive and there is limited long-term research to definitively prove that grass-fed beef is better for you.

## What's the difference between sea salt and table salt?

The most notable differences between sea salt and table salt are in the taste, texture and processing of each. Sea salt is produced through evaporation of ocean water or water from saltwater lakes, usually with little processing. Depending on the water source, this leaves behind certain trace minerals and elements which add flavour and colour to the salt. Sea salt also comes in a variety of coarseness levels.



Table salt is typically mined from underground salt deposits. Table salt is more heavily processed to eliminate minerals and usually contains an additive to prevent clumping. Most table salt also has added iodine, an essential nutrient that helps maintain a healthy thyroid. Sea salt and table salt have the same basic nutritional value, despite the fact that sea salt is often promoted as being healthier. Sea salt and table salt contain comparable amounts of sodium by weight.

Whichever type of salt you enjoy, do so in moderation. It is recommended that you limit your intake of sodium to less than 2,300 milligrams a day (about 1½ teaspoons) — or 1,500 milligrams (about ¾ teaspoon) if you're age 51 or older, or if you are black, or if you have high blood pressure, diabetes or chronic kidney disease.

## Heart-healthy diet: 8 steps to prevent heart disease.

Ready to start your heart-healthy diet? Here are eight tips to get you started.

Although you might know that eating certain foods can increase your heart disease risk, it's often tough to change your eating habits. Whether you have years of unhealthy eating under your belt or you simply want to fine-tune your diet, here are eight heart-healthy diet tips. Once you know which foods to eat more of and which foods to limit, you'll be on your way toward a heart-healthy diet.

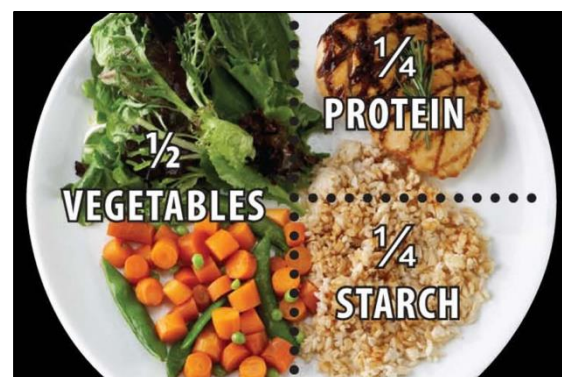
### 1. Control your portion size.

How much you eat is just as important as what you eat. Overloading your plate, taking seconds and eating until you feel stuffed can lead to eating more calories than you should. Portions served in restaurants are often more than anyone needs. Use a small plate or bowl to help control your portions. Eat larger portions of low-calorie, nutrient-rich foods, such as fruits and vegetables, and smaller portions of high-calorie, high-sodium foods, such as refined, processed or fast foods. This strategy can shape up your diet as well as your heart and waistline.

Keep track of the number of servings you eat. A serving size is a specific amount of food, defined by common measurements such as cups, ounces or pieces. For example, one serving of pasta is 1/2 cup, or about the size of a hockey puck. A serving of meat, fish or chicken is about 60 to 85 grams ounces, or about the size and thickness of a deck of cards. Judging serving size is a learned skill. You may need to use measuring cups and spoons or a scale until you're comfortable with your judgment.

### 2. Eat more vegetables and fruits.

Vegetables and fruits are good sources of vitamins and minerals. Vegetables and fruits are also low in calories and rich in dietary fibre. Vegetables and fruits contain substances found in plants that may help prevent cardiovascular disease. Eating more fruits and vegetables may help you eat less high-fat foods, such as meat, cheese and snack foods. Featuring vegetables and fruits in your diet can be easy. Keep





vegetables washed and cut in your refrigerator for quick snacks. Keep fruit in a bowl in your kitchen so that you'll remember to eat it. Choose recipes that have vegetables or fruits as the main ingredients, such as vegetable stir-fry or fresh fruit mixed into salads.

### **Fruits and vegetables to choose.**

Fresh or frozen vegetables and fruits.  
Low-sodium canned vegetables.  
Canned fruit packed in juice or water.

### **Fruits and vegetables to limit.**

Coconut.  
Vegetables with creamy sauces.  
Fried or breaded vegetables.  
Canned fruit packed in heavy syrup.  
Frozen fruit with sugar added.

### **3. Select whole grains.**

Whole grains are good sources of fibre and other nutrients that play a role in regulating blood pressure and heart health. You can increase the amount of whole grains in a heart-healthy diet by making simple substitutions for refined grain products. Or be adventuresome and try a new whole grain, such as whole-grain farro, quinoa or barley.



### **Grain products to choose.**

Whole-wheat flour.  
Whole-grain bread, preferably 100% whole-wheat bread or 100% whole-grain bread.  
High-fiber cereal with 5 g or more of fibre in a serving.  
Whole grains such as brown rice, barley and buckwheat (kasha).  
Whole-grain pasta.  
Oatmeal (steel-cut or regular).

### **Grain products to limit or avoid.**

White, refined flour.  
White bread.  
Muffins.  
Frozen waffles.  
Corn bread.  
Doughnuts.  
Biscuits.  
Quick breads.  
Cakes.  
Pies.  
Egg noodles.  
Buttered popcorn.  
High-fat snack crackers.

### **4. Limit unhealthy fats.**

Limiting how much saturated and trans fats you eat is an important step to reduce your blood cholesterol and lower your risk of coronary artery disease. A high blood cholesterol level can lead to a build-up of plaques in your arteries, called atherosclerosis, which can increase your risk of heart attack and stroke.

The American Heart Association offers these guidelines for how much fat to include in a heart-healthy diet:



## Type of fat

Saturated fat.

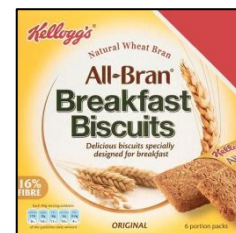
Trans fat.

## Recommendation

Less than 7% of your total daily calories, or less than 14 g of saturated fat if you follow a 2,000-calorie-a-day diet.

Less than 1% of your total daily calories, or less than 2 g of trans fat if you follow a 2,000-calorie-a-day diet.

The best way to reduce saturated and trans fats in your diet is to limit the amount of solid fats, butter, margarine and shortening, you add to food when cooking and serving. You can also reduce the amount of saturated fat in your diet by trimming fat off your meat or choosing lean meats with less than 10 percent fat. You can also use low-fat substitutions when possible for a heart-healthy diet. For example, top your baked potato with low-sodium salsa or low-fat yogurt rather than butter, or use sliced whole fruit or low-sugar fruit spread on your toast instead of margarine.



You may also want to check the food labels of some cookies, biscuits and chips. Many of these snacks, even those labelled "reduced fat", may be made with oils containing trans fats. One clue that a food has some trans fat in it is the phrase "partially hydrogenated" in the ingredient list. When you do use fats, choose monounsaturated fats, such as olive oil or canola oil. Polyunsaturated fats, found in certain fish, avocados, nuts and seeds, also are good choices for a heart-healthy diet. When used in place of saturated fat, monounsaturated and polyunsaturated fats may help lower your total blood cholesterol. But moderation is essential. All types of fat are high in calories.

An easy way to add healthy fat (and fibre) to your diet is ground flaxseed. Flaxseeds are small brown seeds that are high in fibre and omega-3 fatty acids. Studies have found that flaxseeds may help lower cholesterol in some people. You can grind the seeds in a coffee grinder or food processor and stir a teaspoon of them into yogurt, applesauce or hot cereal.

## Fats to choose.

Olive oil.  
Canola oil.  
Vegetable and nut oils.  
Margarine, trans fat free.  
Cholesterol-lowering margarine, such as Benecol, Promise Activ or Smart Balance.  
Nuts, seeds.  
Avocados.

## Fats to limit.

Butter.  
Lard.  
Bacon fat.  
Gravy.  
Cream sauce.  
Nondairy creamers.  
Hydrogenated margarine and shortening.  
Cocoa butter, found in chocolate.  
Coconut, palm, cottonseed and palm-kernel oils.





## 5. Choose low-fat protein sources.

Lean meat, poultry and fish, low-fat dairy products, and eggs are some of your best sources of protein. But be careful to choose lower fat options, such as skim milk rather than whole milk and skinless chicken breasts rather than fried chicken patties. Fish is another good alternative to high-fat meats. And certain types of fish are rich in omega-3 fatty acids, which can lower blood fats called triglycerides. You'll find the highest amounts of omega-3 fatty acids in cold-water fish, such as salmon, mackerel and herring. Other sources are flaxseed, walnuts, soybeans and canola oil.



Legumes, beans, peas and lentils, also are good sources of protein and contain less fat and no cholesterol, making them good substitutes for meat. Substituting plant protein for animal protein, for example, a soy or bean burger for a hamburger, will reduce your fat and cholesterol intake.

### Proteins to choose

Low-fat dairy products such as skim or low-fat (1%) milk, yogurt and cheese.  
Eggs.  
Fish, especially fatty, cold-water fish, such as salmon.  
Skinless poultry.  
Legumes.  
Soybeans and soy products, such as soy burgers and tofu.  
Lean ground meats.

### Proteins to limit or avoid

Full-fat milk and other dairy products.  
Organ meats, such as liver.  
Fatty and marbled meats.  
Spareribs.  
Hot dogs and sausages .  
Bacon.  
Fried or breaded meats.

## 6. Reduce the sodium in your food.

Eating a lot of sodium can contribute to high blood pressure, a risk factor for cardiovascular disease. Reducing sodium is an important part of a heart-healthy diet. The Department of Health and Human Services recommends:

- Healthy adults have no more than 2,300 milligrams (mg) of salt a day (about a teaspoon of salt).

- People age 51 or older and people who have been diagnosed with high blood pressure, diabetes or chronic kidney disease have no more than 1,500 mg (about half a teaspoon) of salt a day.

Although reducing the amount of salt you add to food at the table or while cooking is a good first step, much of the salt you eat comes from canned or processed foods, such as soups and frozen dinners. Eating fresh foods and making your own soups and stews can reduce the amount of salt you eat.

If you like the convenience of canned soups and prepared meals, look for ones with reduced salt. Be wary of foods that claim to be lower in sodium because they are seasoned with sea salt instead of regular table salt — sea salt has the same nutritional value as regular salt.

Another way to reduce the amount of salt you eat is to choose your condiments carefully. Many condiments are available in reduced-sodium versions and salt substitutes can add flavour to your food with less sodium.

#### Low-salt items to choose

Herbs and spices.

Salt substitutes.

Reduced-salt canned soups or prepared meals.

Reduced-salt versions of condiments, such as Tomato juice.

reduced-salt soy sauce and reduced-salt ketchup.

#### High-salt items to avoid

Table salt.

Canned soups and prepared foods, such as frozen dinners.

Soy sauce.

### 7. Plan ahead: Create daily menus.

You know what foods to feature in your heart-healthy diet and which ones to limit. Now it's time to put your plans into action. Create daily menus using the six strategies listed above. When selecting foods for each meal and snack, emphasize vegetables, fruits and whole grains. Choose lean protein sources and healthy fats, and limit salty foods. Watch your portion sizes and add variety to your menu choices.

### 8. Allow yourself an occasional treat.

Allow yourself an indulgence every now and then. A candy bar or handful of potato chips won't derail your heart-healthy diet. But don't let it turn into an excuse for giving up on your healthy-eating plan. If overindulgence is the exception, rather than the rule, you'll balance things out over the long term. What's important is that you eat healthy foods most of the time.

Incorporate these eight tips into your life, and you'll find that heart-healthy eating is both doable and enjoyable. With planning and a few simple substitutions, you can eat with your heart in mind.



## Food energy density: Feel full on fewer calories.

Who doesn't want to fill up on fewer calories? Find out how eating the right foods can help you do just that!

Energy density is just another way to say caloric density — after all calories provide energy. In a nutshell:

- It is the number of calories in the amount or weight of food you eat.
- Foods that don't have a lot of calories packed into each bite, like fruits and vegetables, are low in energy density. They also tend to be low in fat and high in water or fibre content.
- Foods high in energy density pack a lot of calories into a small volume of food; these include fatty foods, such as many fast foods, and foods high in sugar, such as sodas and candies.



### Eat more low-density foods.

How full you feel is determined by the volume and weight of food, not by the number of calories you consume. If you choose foods with low energy density, few calories for their bulk, you can eat more volume but consume fewer calories because of two key factors:

- Water.** Most vegetables and fruits contain a lot of water, which provides volume and weight but few calories. For example, half of a large grapefruit is 90 percent water with just 50 calories.
- Fiber.** The high fibre content in foods such as vegetables, fruits and whole grains adds bulk to your diet, so you feel full sooner. Fibre also takes longer to digest, making you feel full longer. Adults need about 25 to 35 grams of fibre a day, but the average adult consumes much less. Increase your fibre gradually while you increase the fluids in your diet.

### Breakfast.

Use these visual comparisons to help guide your selections.  
For about 300 calories, you could have...

- High-density meal:** A single large glazed doughnut or  
**Low-density meal:** A bowl of bran flakes with skim milk, blueberries and a slice of whole-wheat toast with peanut butter.





## Lunch.

For about 275 calories, you could have...

High-density meal: A candy bar or

Low-density meal: A warm bowl of soup, loaded with fibre-rich beans and vegetables



## Dinner.

For about 600 calories, you could have...

High-density meal: A bacon cheeseburger or

Low-density meal: A sandwich with soup, fresh fruits and veggies, and a few crackers



## Snack.

For about 150 calories, you could have...

High-density snack: 30 grams of potato chips, or

Low-density snack: 3-4 cups of air-popped popcorn.



As you can see, you can eat fewer calories yet feel more satisfied by choosing foods that are low in energy density, in other words, you can have more food. Try reducing the fat and increasing the amount of fibre-rich foods, such as fruits and vegetables, in your favourite dishes.

## Coordinated Veterans' Care.

The Coordinated Veterans' Care (CVC) Program is a team-based program designed to increase support for Gold Card holders with one or more targeted chronic conditions or complex care needs and those who are at risk of unplanned hospitalisation. CVC focuses on improving the management of chronic conditions and quality of life for eligible Gold Card holders who are most at risk of unplanned hospitalisation. Gold Card holders can include veterans, war widow/widowers and dependants. The programme is aimed at Gold Card holders with the following chronic conditions:

- congestive heart failure





- coronary artery disease
- pneumonia
- chronic obstructive pulmonary disease
- diabetes.

GPs are paid to enrol Gold Card holders onto the CVC Program and to provide ongoing, comprehensive and coordinated care with the assistance of their practice nurse or a community nurse (from a DVA contracted provider).

If you are DVA Card Holder, speak to your GP today to see if you can be enrolled in the CVC Program.

## Good Advice.

It is more important to live longer than to have more wealth.

- In a 'high end' hand phone, 70% of the functions are useless.
- In an expensive car, 70% of the speed is not needed.
- In a luxurious villa, 70% of the space remains un-occupied or un-utilized.
- In a whole wardrobe of clothes, 70% of them are seldom worn.
- Out of whole life's earnings, 70% stays behind for other people to use.
- 70% of talent is not utilized

So, how to make full use of our 30%?

- Go for a medical checkup even when you feel fit.
- Drink more water even if you're not thirsty.
- Let go your ego, whenever you can.
- Give in even if you are 'right'.
- Be humble even if you are very powerful.
- Be contented even if you are not rich. Have a very good Life!!!

In a dark and hazy room, peering into a crystal ball, the fortune teller delivered grave news: "There's no easy way to tell you this, so I'll just be blunt. Prepare yourself to be a widow. Your husband will die a violent and horrible death this year." Visibly shaken, the young woman stared back at the old woman's lined face, then at the single flickering candle, then down at her shaking hands.

She took a few deep breaths to compose herself. Her mind raced. A question forced its way out... she simply had to know.. She met the Fortune Teller's gaze, tried to steady her voice and asked, "Will I be acquitted?"

## Are you a current or former defence member who resided in Canberra in the 1970s or 1980s?

On 1 July 2015 the ACT Government Asbestos Response Taskforce released a register of residential addresses in the ACT affected by loose-fill asbestos insulation (also known as Mr Fluffy insulation).

If you resided in Canberra in the 1970s and/or 1980s and suspect that you may have been exposed to asbestos as a result of your employment and housing with Defence call 1800 DEFENCE (1800 333 362) and ask to be put through to the Defence Asbestos Exposure Evaluation Scheme (DAEES), or visit <http://www.defence.gov.au/dpe/ohsc/programs/Asbestos/>.



For more information regarding the ACT Government Asbestos Response Taskforce visit <http://www.asbestostaskforce.act.gov.au/>.

A list of affected houses is available on the ACT Taskforce's website here <http://www.asbestostaskforce.act.gov.au/the-list>.

There's more info [HERE](#)



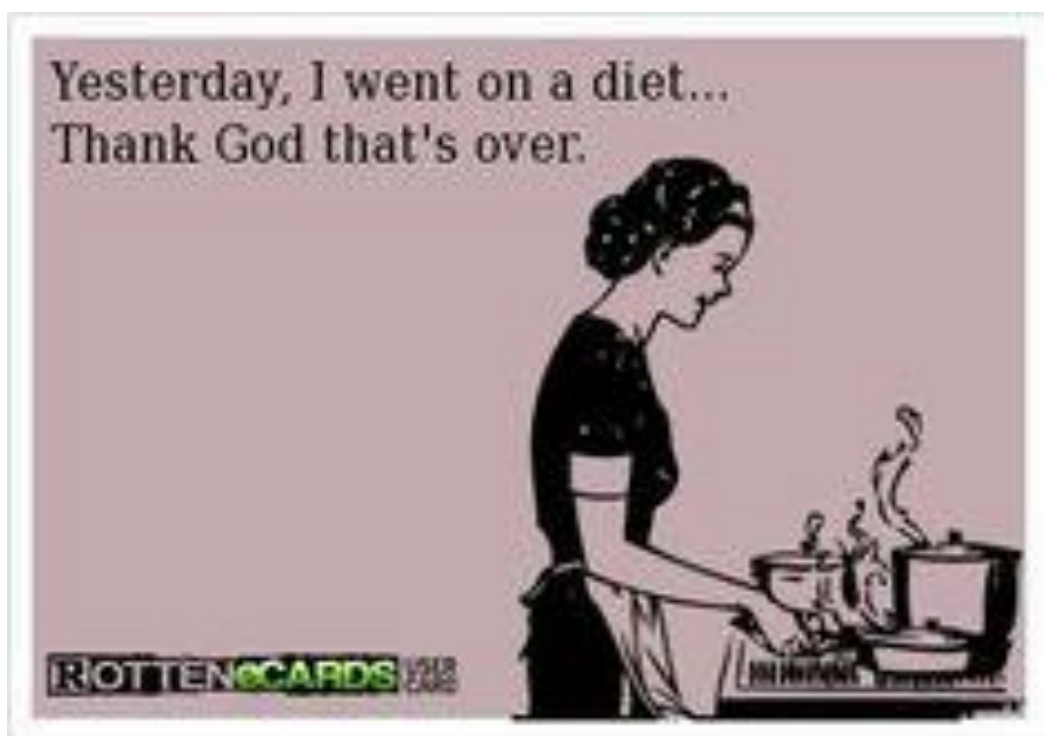
# THE RAM

THE MAGAZINE BY & FOR SERVING  
& EX-RAAF PEOPLE & OTHERS



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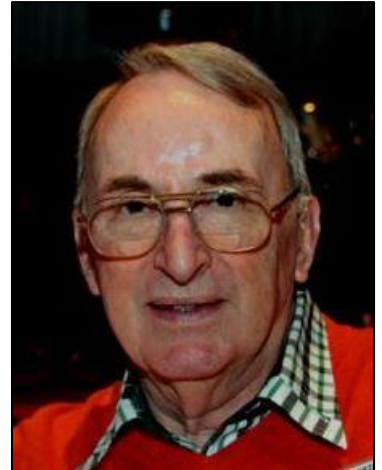
## Pedro's Patter.

Jeff reminisces a flight he had in the venerable (and reliable) old F-27 Friendship when he was working with the Department of Civil Aviation (DCA). Back then DCA ran F-27 100's (as did TAA, Ansett and East West Airlines) though the DCA versions had bigger fuel tanks and could cruise at 230 kts.

This trip was over to Norfolk Island to look at the NDB. It was interesting for two reasons, both related to the weather.

The first was an unusual weather pattern. Normally one gets a westerly wind however on this occasion there was an easterly wind, meaning a head wind out to the island. This stretched the F27 from a fuel point of view. Our PNP (point of no return) calculations required an early decision en route on continuing the flight or returning to Richmond, our departure base, or diverting to (I think) Noumea.

As it happened the wind eased off so a diversion was not necessary. A further complication was the surface wind at Norfolk Island (NF). Back then there were two runways, one sealed and one short gravel one. Communication with Flight Service at NF ruled out landing on the sealed runway due to cross wind so the only option was the short gravel runway, also with a strong cross wind. Now the F27 is a bit of a hand full in a strong cross wind, manhandling it onto the ground was OK but due to manipulating the controls I was late getting the propeller lock in place, causing the propeller below lock light to flash and the horn scream. I got the aircraft under control and, with heavy breathing taxied in to the Tarmac area.







Next day the weather ruled out flying so we grabbed a rental car to do a bit of exploration and sight-seeing. Myself driving with the other three crew members consulting maps, we continued inland, avoiding the free roaming cattle and chose to branch off the main road down to the old prison site. It had been raining and a sign warned about the soft surface of the road down to the historic area. We ended up almost out of control around the steeply sloping and curved road.



By the grace of God we arrived at the bottom, ready to explore the old prison ruins. Later in the day we drove to the cemetery. Wandering among the old grave stones, I was intrigued to find some with a skull and crossbones inscribed above the identifying name of the buried person, not only that but several with identical death dates. Clearly the cause of death was a firing squad.



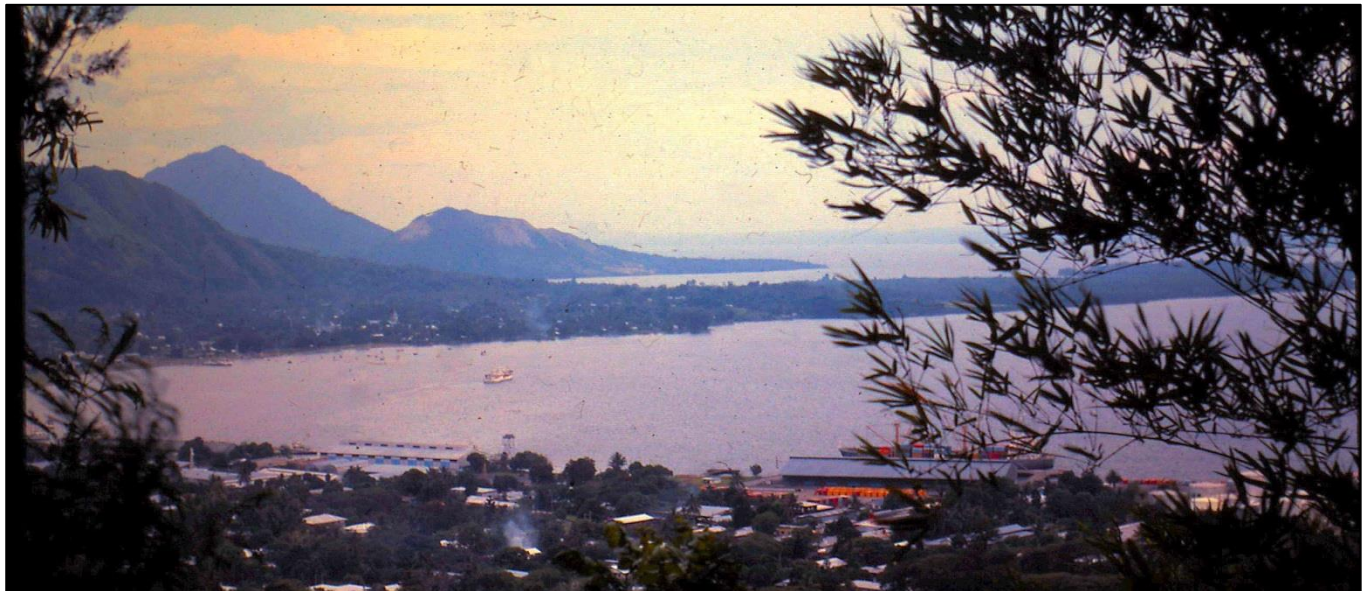
The next two days we completed our navaid survey which involved making orbits and flying in and out on cardinal radials to measure signal strength. The measurements were taken by the 3-man survey crew seated down the back of the aircraft, using specially fitted radio tech equipment. We also carried an engineer who kept an eye on things and also refuelled our aircraft, which we paid for with vouchers given to us prior to our departure from Essendon, our base in Australia.





Accommodation for our crew over at Norfolk was taken care of by the DCA flying Unit admin people who had pre-arranged it. We stayed in one of the many wonderful hotels on the Island and from memory, we also ate very well. Next day we headed west for home.

Another interesting trip, though this time in a Caribou while attached to 38 Sqn Det A in Moresby, was to Rabaul in PNG. That was before the 1994 volcanic eruption which wrecked the city and closed the airport. Even then, landing from the bay side you had to pass over two semi-dormant volcanoes called Mother and Daughter. Passing over the larger of the two one could smell strong sulphur fumes coming into the cockpit. Our task was to ferry an army contingent across to Vunakanau, just across the bay. We landed on a grass strip, coming to a stop with hordes of curious local people inspecting the aircraft.



As usual we had some time off before completing the task so explored the WW2 submarine pens built by the Japanese by carving holes in the cliff face. There were still subs there back then, but I haven't been back since to see if they are still there.

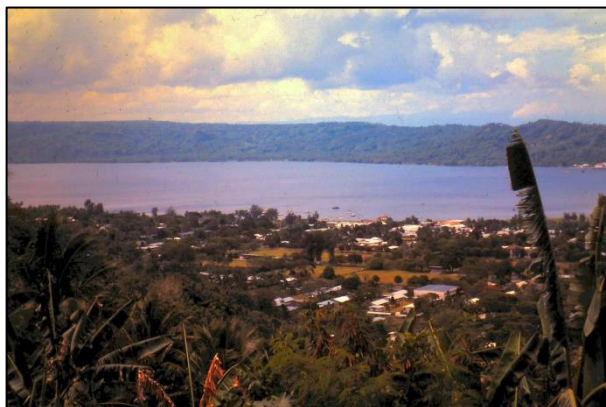
During World War II, Rabaul was captured by the Japanese and it became their main base for military and naval activity in the South Pacific. During their occupation the Japanese dug many kilometres of tunnels as shelter from Allied air attacks and as army barracks and support structures, including a hospital. By 1943 there were about 110,000 Japanese troops based in Rabaul.





On 18 April 1943, Admiral Isoroku Yamamoto, the architect of the Japanese attack on Pearl Harbor, was shot down and killed by a United States P-38 Lightning over south Bougainville after taking off from Rabaul on an inspection tour.

Japanese communications giving Yamamoto's flight itinerary were decrypted by United States Navy cryptographers, who passed on the information to operational units. Sixteen United States Army Air Forces P-38 Lightning fighters took off from Guadalcanal and intercepted and destroyed the two bombers of the Yamamoto flight and damaged some of the escorting Japanese fighters.



Instead of capturing Rabaul during their advance towards the Japanese Home islands, the Allied forces decided to bypass it by establishing a ring of airfields and naval bases on the islands around it. Cut off from re-supply and under continual air attacks as part of Operation Cartwheel, the base became useless. The Pacification of Rabaul took until the end of the war and was only completed following the Japanese surrender in August 1945.

As a tourist destination and before the 1994 eruption, Rabaul was popular for scuba diving and for snorkelling sites in its spectacular harbour. There are still several diving operators based there, but tourism has yet to recover to its pre-eruption levels.



While we were there, we stayed at the Kaivuna hotel, paid for from a large cash imprest given to us by the RAAF from which we paid all our expenses. As I recall we dined well.

## The 4 Steps of Spin Recovery.

**boldmethod** ▶

If you're a private pilot or if you're interested in flying or even if you're neither, you would still have heard the term "Stall" but do you know what a stall is and once in, how do you get out??

If you're a pilot you would have practiced a spin? If you have (and even if you haven't), you've probably heard the recovery acronym "PARE". But do you know what each step is for?

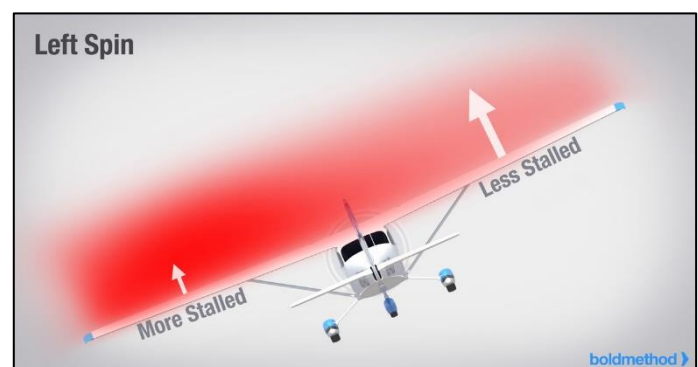


First off, what exactly is a Spin?

Before we jump into the spin recovery steps, let's take a quick look at what's happening in a spin. The Pilot's Handbook of Aeronautical Knowledge defines a spin is "an aggravated stall that results in an airplane descending in a helical, or corkscrew path."

Which brings us to spin point number one: both wings are stalled in a spin, but one is more deeply stalled than the other. The "more stalled" wing is on the inside of the spin, it flies at a higher angle-of-attack and it generates less lift than the outside wing.

Since your high wing generates more lift than the low wing, it rolls your aircraft into the spin and at the same time, your low wing





produces more drag, because it's at a higher angle-of-attack and that drag causes your plane to yaw into the spin. When you combine both forces, you wind up in a fully-developed spin.

So how do you recover with "PARE"?

Spin recovery is pretty simple: break the stall on both your wings. When you do, your plane will fly itself out of the spin and that's where the "PARE" acronym comes into play.

Step 1. P: Power to Idle.

The first step in spin recovery is reducing your throttle to idle, but why would you take power out when you're already stalled?

In a normal stall, you add power to recover, but in a spin, adding power makes recovering more difficult. And it has everything to do with your aircraft's tail.

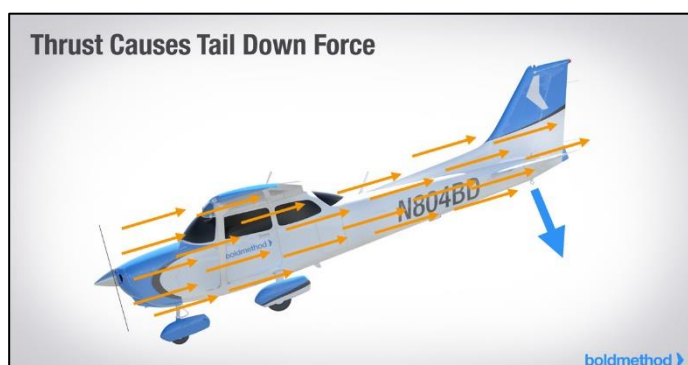
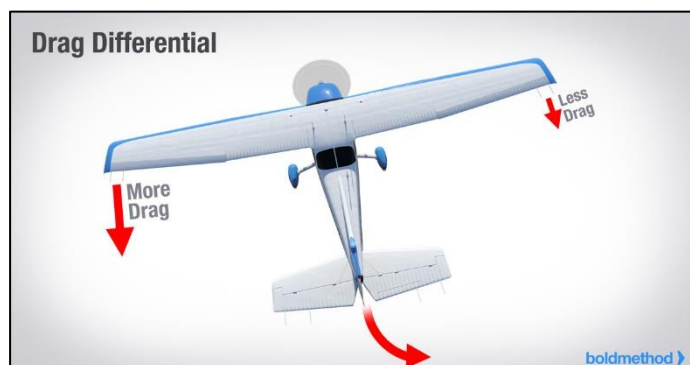
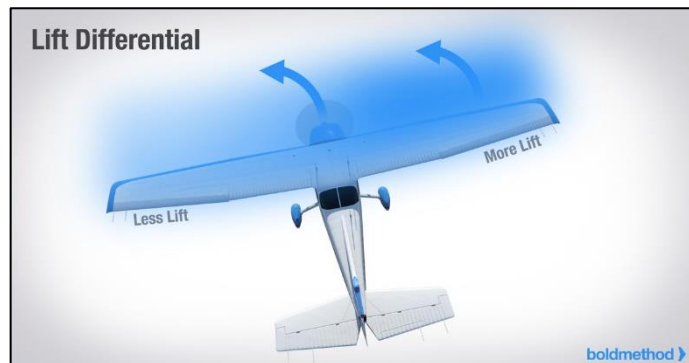
When you're at a high power setting, airflow from your propeller strikes your horizontal stabilizer, causing a tail-down force and pitching your nose up. On top of that, if your centre of thrust is lower than your centre of gravity, it creates torque that pitches your nose up even further.

When you take the power out, you eliminate both of these factors, making it easier to get the nose down and fly out of the spin.

Step 2. A: Ailerons Neutral

When you bring your ailerons to neutral, you help your wings reach the same angle-of-attack, which helps you reduce the rolling and yawing moments in the spin. If you try to raise your inside wing using ailerons, you'll actually make the spin worse, because you increase the angle-of-attack of the inner wing.

And what about rolling your ailerons into the spin?



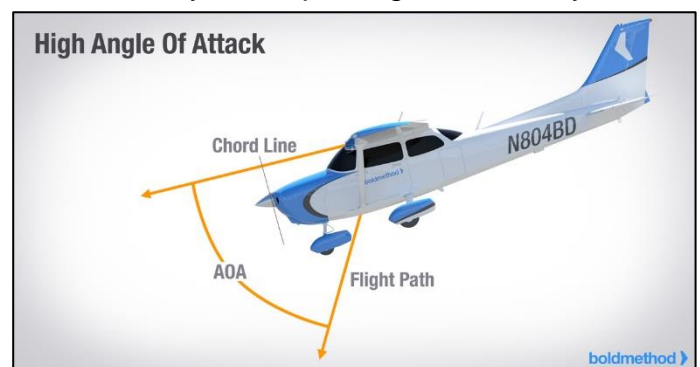
That's not a good idea either, because as you start to recover, your outside wing is at a higher angle-of-attack, and you can inadvertently start spinning in the opposite direction during recovery.

Step 3. R: Rudder Opposite Spin.

The next step is one of the most important ones: rudder. If you're spinning to the left, you add right rudder. And if you're spinning right? Add left rudder. When you add opposite rudder, you stop the rolling and yawing moment of the spin.

Step 4. E: Elevator Forward.

And for the last step...breaking the stall. Once you have your plane configured to fly out of the spin (steps 1-3), it's time to reduce your angle-of-attack and keep on flying.



By quickly moving the control yoke forward, you get yourself back under the critical angle-of-attack, and you un-stall your wings. One of the hardest parts of this step is that you feel like you're going almost straight down in a spin and it doesn't feel natural to push forward on the yoke. But it's the best (and only) way to break your stall quickly and get back to straight-and-level flight.

Finish Your Spin Recovery.

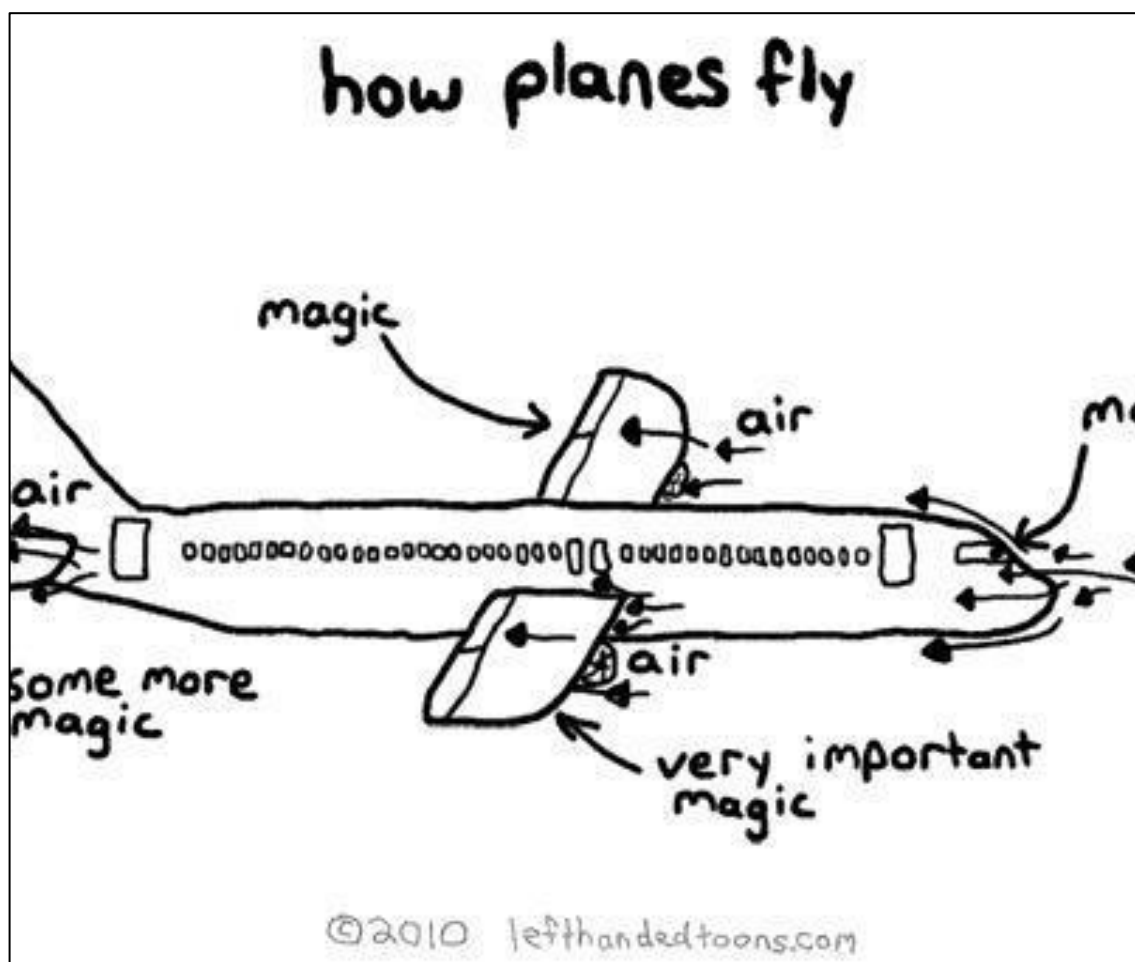
Once you've completed these 4 steps, your plane will fly itself out of the spin. When it does, bring your rudder to neutral and raise the nose, and slowly add power to get as you get back to level flight.

Most training aircraft exit a spin very quickly but you should always use your aircraft's Pilot's Operating Handbook (POH) and remember, have your spin recovery checklist memorized. After all, it's pretty hard to read a checklist during a spin.

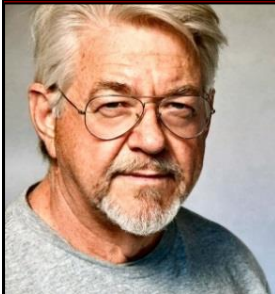
You can see some video on spins [HERE](#)

Beware of buying anything  
when the manuals are bigger than the equipment.





Man cannot live by bread alone.  
He also needs a roll of duct tape and a can of WD-40.



## It's Elementary.

Anthony Element

### Modelling – It Ain't what it used to Be.

It was late afternoon when I strolled into Harvey's garage and reverently placed a freshly chilled slab in his fridge. Harvey's head appeared from the other side of his Harley, where he'd been squatting down removing what were probably imaginary bits of dust from his beloved bike, with a tiny artist's paintbrush.

"A beer!" he said, "What a bloody good idea," as though he'd never have thought of it by himself.

He carefully put the brush in its place on his enormous tool board. As I passed him the goods, he said, "I've been thinking..." He took a long slug. "About modelling."

"You're too fat, too old, you're the wrong sex and you don't walk funny," I replied.

"Nah, not that kind of modelling."

"Oh, you mean, like with little bits of plastic and tiny pots of paint, and you need to get a life."

Harvey belched and scratched his beard. "Computer modelling is what I'm talking about, mate."

I couldn't think of a smart arse reply to that, so I just said, "Really?" "Yep. Did you know that, unless it's a genuine, credible scientist talking, then the words, 'computer model' are usually code for 'Bullshit'?"

"At the risk of repeating myself... really?"

"Yeah, but before I get into that, I'm having second thoughts about this whole technology taking us forward thing. A couple a hundred years ago, we had pocket watches, which were all well and good, but you had to take them out of your pocket to tell the time. They were replaced by wrist watches. Very convenient. Then they got replaced by digital watches. Cool. But now







they're being replaced by smartphones... which we keep in our pockets. A bit bloody circular, ay?"

Harvey took another long drink, while I pondered the fact that I couldn't be bothered putting on my watch ever since I'd gotten my iphone.

"Anyhow, back to computer models. The idea is that you can design software that can predict the future based on available data." "Well, that sounds reasonable," I said. "It is. But you can never accurately know all the stuff that might affect whatever it is you're trying to predict. So the way they get around it is to make assumptions. Slippery little suckers, assumptions are."

I thought Harvey was going to make some comment along the lines of making an ass out of u and me, but I should've known better. Old Harv' can get pretty deep when he's got a beer in hand.

"Here's an example. Back in the Nineties, the ACCC, that's the Australian Competition and Consumer Commission, created a computer model that predicted Australia would be billions of dollars better off if the federal government quit subsidizing the car industry and just let it quietly disappear up its own rear end."



"That doesn't sound right," I said, looking out at my beloved Monaro parked in the driveway.

"Well it was music to the ears of a few politicians. Until someone let slip a few of the assumptions the ACCC had made in designing the modelling program. First, they just assumed that every person who lost their job in the car industry would immediately get another job. They didn't bother talking to the Department of Social Security in Adelaide – who would've told 'em that unemployment in SA was on the rise at that time - they just... assumed.



Second, because there was a colossal boom in the computer industry in the Nineties, they 'assumed' that everyone who lost a job in the car industry would immediately get a job in the computer industry.

And third, because average wages in the computer industry were higher than in the car industry, they 'assumed' that every one of these folks who'd lose their jobs on the GM and Ford production lines would earn a higher wage once they'd been laid off because they'd all now be computer professionals. And bugger me if the model didn't predict we'd all be better off."

I slowly digested that while I pitched my empty tinny into Harvey's bin and helped myself to another one. "Seems kinda stupid to think that a guy who'd spent twenty years installing windscreens would crack a gig as a programmer, right off the bat."

"No kidding," said Harvey.

"So why would they do that?"

"Well, the ACCC's job is to promote free markets. So they're ideologically opposed to any kind of government intervention. And because they're all about free markets, they only ever think about the economy. They couldn't care less about our society, 'cos that's not in their job description. So, lo and behold, they came up with a computer model that confirmed exactly the scenario they'd been having wet dreams about – stopping governments of any persuasion from putting any more money into supporting an industry."



"But all those people out of a job..."

"Not their problem. But luckily, wiser heads prevailed. And that, me old mate, is why computer modelling is usually code for bullshit; because most of the time the people doing the modelling make assumptions that guarantee the model will predict exactly what they want it to."

I thought about that for a bit. "But on the News, they just report what the models predict."

"Bingo," Harvey said. "Because the media believe we've all got the attention span of a goldfish, they don't ever go into the details of a story, unless of course, it's about the Kardashians, then they report in excruciating detail. Which means they never take a look at the assumptions in the models that produce the result they're reporting on."





Harvey's my best mate, but sometimes he can make me feel bloody uncomfortable. I suddenly remembered a doco I'd seen. "The Fracking Industry reckoned they had computer models showing that pumping thousands of chemicals and millions of gallons of water underground to force gas up through the soil wouldn't affect our water tables."

"Well," Harvey said, shaking his head. "Who could possibly have seen that coming?"

"And now," I continued, "there are people in the US, in places where fracking has been going on for years, who can set fire to the water coming out of their taps."



"Which," said Harvey, "is bloody handy if you want to bbq your sausages and boil them at the same time. Bit of a worry if you've got to drink it though. Oh, and better not smoke while having a bath."

"So," I said, "what do you reckon we should do about it?"

He stared down at his half empty can. "About the only thing we can do is, any time we hear the words 'Computer model' being spoken by a politician or a bureaucrat, just assume that every other word in the sentence is garbage."

Then Harvey raised his can. "And stick with beer, 'cos our water'll pretty soon be undrinkable."

## Suicide prevention app supports veterans anywhere, anytime.

The Minister for Veterans' Affairs, Senator the Hon. Michael Ronaldson, released a free mobile phone app to help serving and ex-serving Australian Defence Force (ADF) personnel deal with suicidal thoughts.

"*Operation Life* is an important initiative that has been developed in consultation with specialist veteran mental health specialists. This is specifically targeted towards assisting those with the unique challenges and circumstances that military service can present," Senator Ronaldson said.



"I would encourage all current and former ADF members to talk to your mates about this app, particularly those who may be experiencing difficulties".

“The app has been designed to support professional treatment and we recommend users work with a clinician to set the app up the first time and learn when and how to use it to stay safe between clinical sessions.”

The *Operation Life* app provides:

- easy access to emergency and professional support services and a Personal Support Network of trusted people to call when help is needed
- a grounding exercise to help users regain control of suicidal thoughts so that they can access support, once they are thinking clearly
- the ability to look through photos, listen to chosen music and record and review positive reminder messages about worthwhile life experiences and aspirations for the future – reminders of why life is worth living
- advice on staying safe and when to seek help.

This app is the Government’s latest initiative in a suite of suicide awareness and prevention resources, which includes the [Operation Life Online](#) website and face-to-face ASIST (Applied Suicide Intervention Skills Training) workshops delivered nationally through the Veterans and Veterans Families Counselling Service (VVCS).

“Any suicide is tragic. Suicide is the leading cause of death in Australia for men aged between 35 and 44 and women between 25 and 34 years old and serving and ex-serving personnel are not immune from this. It is vital anyone who experiences intense feelings of despair and hopelessness, or feels like they have lost control, seeks professional help,” Senator Ronaldson said.

“The Government is working hard to develop a comprehensive suicide prevention strategy that includes training to assist at-risk individuals, programmes to build resilience, self-help and educational materials, a 24-hour veteran support line and access to clinical services.”

The *Operation Life* app is available free via the iOS App Store and Android Google Play.

## **The US Military’s V-22 Osprey.**

The, which first flew in March 1989 and was introduced into service in June 2007, is a versatile aircraft that can fly like both a normal fixed wing aircraft and a helicopter thanks to its tilt-rotor design. This enables it to carry out a range of missions for the US Marines, Navy, and Air Force



including disaster relief, personnel transport and recovery, medical evacuation, and logistics support.

The failure of the Iran hostage rescue mission in 1980 demonstrated to the United States military a need for a new type of aircraft, that could not only take off and land vertically but also could carry combat troops, and do so at speed. The U.S. Department of Defence began the Joint-service Vertical take-off/landing Experimental (JVX) aircraft program in 1981, under U.S. Army leadership.



The Osprey's development process has been long and controversial, partly due to its large cost increases, some of which are caused by the requirement to fold wing and rotors to fit aboard ships. The development budget was first planned for \$2.5 billion in 1986, but this increased to a projected \$30 billion in 1988. By 2008, \$27 billion had been spent on the program and another \$27.2 billion was required to complete planned production numbers. Between 2008 and 2011, the estimated lifetime cost for maintaining the V-22 grew by 61 percent, mostly allocated to maintenance and support.

Its production costs are considerably greater than for helicopters with equivalent capability, specifically, about twice as great as for the Chinook which has a greater payload and an ability to carry heavy equipment the V-22 cannot. An Osprey costs about \$60 million to produce, whereas the Chinook cost about \$35 million. A good deal??

In spite of the enormous costs and the scandal that had dogged the aircraft (falsifying maintenance costs, reports condemning the aircraft as unsafe, overpriced and completely inadequate) in 2005 the Pentagon approved full rate production and placed an order for 408 of the aircraft for use by the US Marines and the USAF. As well, interest has been shown by countries such as India, Israel, Japan, South Korea and the UAE.



So how does this modern-day Transformer work?

The Osprey has two large, three-bladed rotors that spin in opposite directions, creating lift and eliminating the need for a tail rotor to provide additional stability. Each 11.5 metre diameter propeller is driven by an engine that produces over 6,000 horsepower and both the wings and propellers are foldable, so the 16-tonne craft can be easily stored on the decks of aircraft carriers. The V-22's two Rolls-Royce AE 1107C engines are connected by drive shafts to a common central gearbox so that one engine can power both proprotors if an engine failure occurs, however, the V-22 is generally not capable of hovering on one engine (Click the pic below to see it unfold.)



When the craft is ready to take off, its rotors are positioned vertically—like any traditional, two-bladed helicopter. While in flight, however, the rotors shift to a horizontal position (in a matter of 12 seconds!) so that the craft now resembles and operates like a fixed wing aircraft, utilizing its wings for lift. To land, the Osprey reverses the process by raising its rotors back to the vertical position.

Because it can take off, land, and hover like a helicopter, the Osprey can be used in missions that involve transporting troops to remote areas or conducting long-range, maritime rescue operations. It has a longer range than its copter cousin (270 to 580 miles), can fly at greater speeds (315 mph), and can carry up to 20,000 pounds (or 24 troops) in its cargo bay.

(Click the pic below to see it get airborne.)



The Osprey is equipped with 16 fuel tanks (ten integrated into the wings and six in the fuselage), giving it a range of just under 900 nautical miles (1,700 klms) however, the aircraft is capable of being refuelled while airborne. Boeing is also developing a roll-on/roll-off aerial refuelling kit, which would give the V-22 the ability to refuel other aircraft.



In 2007, 10 Ospreys were assigned for work in Iraq where they were praised for their speed and range over conventional helicopters.

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In 2009 they were deployed to Afghanistan and by 2011 they had surpassed over 100,000 flight hours and were praised by the Marine Commandant as being the "safest airplane, or close to being the safest airplane" in the Marine Corps inventory.

It can be armed with one M240 machine gun or a M2 Browning machine gun on the loading ramp that can be fired rearward when the ramp is lowered and/or a retractable, belly mounted 7.62 mm [GAU-17 minigun](#).



After eating an entire bull, a mountain lion felt so good he started roaring. He kept it up until a hunter came along and shot him.  
The moral : When you're full of bull, keep your mouth shut.



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## 35 Sqn Colours Parade.

08 August, 2015

The RAAF's 35 Squadron has had a chequered career. After forming in March 1942, 35 Sqn operated an assortment of aircraft in support of its courier and supply operations in Western Australia. Based at Pearce from August 1943, the Squadron was re-equipped with Dakotas, and with these new aircraft, its operations were extended to Eastern Australia, New Guinea and the Pacific region. After Japan's surrender, No 35 Squadron supported the movement of three RAAF fighter Squadrons and various support Units to Japan before disbanding in June 1946.

In June 1966, 35 Sqn was reformed and the RAAF Transport Flight which had recently been established in Vietnam and which was equipped with the Caribou, was re-titled 35 Squadron and flew from its home base at Vung Tau for the next 6 years. The Caribous regularly operated at very low level and came under constant small arms fire from the ground. These hazardous flying conditions resulted in the loss of several aircraft and injuries to both passengers and aircrew. In February 1972, the final elements of 35 Sqn returned to Richmond in NSW and were the last RAAF unit to leave Vietnam.



Four years after arriving back in Australia, the Squadron moved to Townsville where Iroquois helicopters joined the Unit's Caribous. At that time, 35 Sqn were the first and is still the only RAAF Sqn to operate both fixed and rotary wing aircraft. With this mixed fleet, 35 Sqn undertook Army tactical support tasks and civil aid operations, including search and rescue, medical evacuations and flood relief work. It continued its mixed rotary/fixed wing operations until December 1989, when the Iroquois were transferred to Army control, then in 2000, Caribou operations were rationalised and No 35 Squadron's aircraft and operations were amalgamated into 38 Sqn and 35 Sqn was reduced to "paper only" status. In 2009 it was decided to ground the Caribous (see [HERE](#)) and 38 Sqn was without aircraft until the arrival of the Beech 350 which it still operates today.

In December 2011, after the Caribou had been retired, the RAAF issued a request for 10 C-27Js, valued at AUD\$1,300m. Australia opted for the C-27J over the rival EADS CASA C-295 following an evaluation which noted the C-27J, which had a cabin that was wider and higher, was capable of carrying the Army's G-Wagon (right) and C-130 sized pallets. Getting the aircraft was one side of the equation, the other side was where to base them and who would operate







them. It was decided to give 35 Sqn another run, so in 2013 the old girl was pulled out of the cupboard once again and blokes and blokettes were “volunteered” to join the Sqn which was reformed at Richmond. For two years, 35 was the perfect Sqn, it had a bunch of blokes/blokettes, some vehicles, yellow treadlies, some GSE, a hangar, a smoko room, a CO and a WOD who were both good blokes and it had none of those annoying, noisy aeroplanes. Then in June 2015 all that changed.

On the 30th June, the then Chief of Air Force, Air Marshal Geoff Brown, AO, welcomed the first C-27J Spartan to Richmond at a ceremony which coincided with the 90th anniversary of the base's establishment. Being a little different to the



Caribou which it replaces, the Spartan comes equipped with gadgets that will protect it from a range of threats, it carries equipment such as a missile warning systems, electronic self-protection, secure communications and battlefield armour. It has a floor strength equal to that of a C-130 and the large cargo cabin is able to accommodate Hercules pallets. Unlike the old Caribou, it is pressurised and air conditioned

and is equipped with a dedicated aero-medical oxygen supply and 12 power centres for medical or auxiliary equipment. For its paratroop role, it is equipped with door-jump platforms and static lines and jumps can be carried out from the paratroop doors on both sides of the aircraft or from the cargo ramp and rear door.

As everyone knows, the ADF is incapable of accepting a new aircraft or of re-birthing a Squadron without holding a spectacular parade (the Military's equivalent to a sausage sizzle) and when you've two of these events happening together, there was absolutely no chance the white webbing was going to miss out on being displayed. The Sqn decided to hold a Colours' Parade on the 8<sup>th</sup> August and to make the C-27J available for those attending to have a look over it. One of the two remaining operational Caribous and a DC3, both of which are flown by HARS (south of Wollongong) were also invited and were parked on the tarmac each side of the new kid on the block.

The [RTFV-35Sqn Association](#), headed up by John McDougall (President) and John Sambrooks (Secretary), planned to attend and to make a weekend out of it and they made us an offer which was too good to refuse. We, of course, went along!!

A “Meet and Greet” was planned for the Friday night, to be held at the Windsor RSL, a venue that a bunch of years ago was definitely one of the “must go” destinations for



many from the Association. A few from the RTFV-35Sqn Assoc (below) met at the RSL earlier in the day to check a few things out, (to see whether the beer was still cold), then when satisfied that everything was in order, the People's Champion gave the All Clear and the "Meet and Greet" kicked off about 4.00pm. Following are some of those that attended.

(You can click most of the pics for a better quality copy which you can download and/or print).

On an inspection tour are, **L-R:** Ted McEvoy, Ken White, Geoff Brand, Trev Benneworth, John Sambrooks, John McDougall, John Broughton.



John Boyne and Kim Roots





Ken Howard and Graham Mengersen.



Gary and Pat Kimberley.



Graham "Blue" Silk.



John Cameron and Terry Barker.



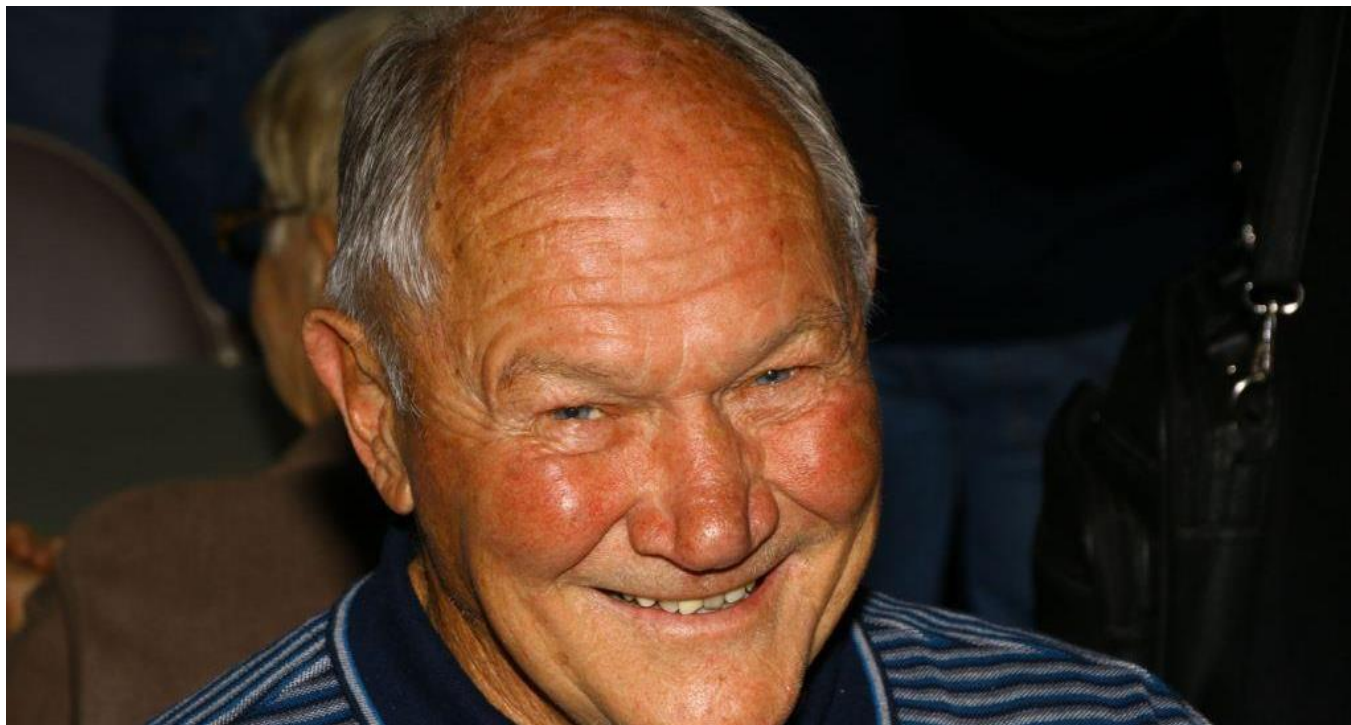
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Terry "Dollar" Geary.



Gary and Margaret Hauck.





Hughie McCormick, Ken and Dorothy Trim.



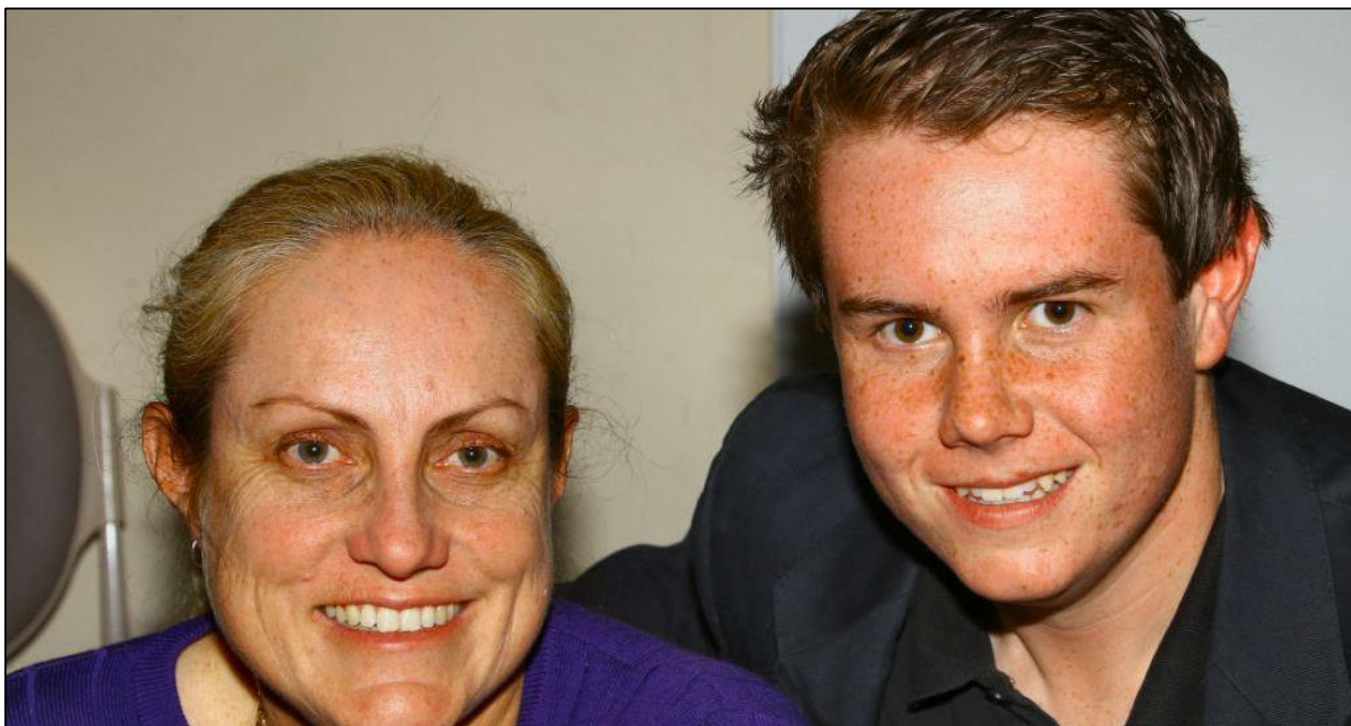
Rod Smith (Ex WOE) and Brooke Raymond.

Rod joined the RAAF in 1965 as an apprentice and retired after 36 years of service. He served in 11 Sqn, Mntce East Sale, PNG, ARDU, 35 Sqn, RESENG QANTAS, 503 Wing, and 36 Sqn. Brooke started her career in the US Air Force as an Aircraft Technician. She then transitioned into being a Flight Engineer on C-141s. Following that she went into Command and Control and retired a First Sergeant after a very satisfying and long career. They have been happily married for some years.





Sandra Mengersen, Cherril Millsom and Nanette Cornish.



Sandra and Dean Sanderson.





Beetle welcomes the Bou and the Bou keeper to Windsor..



Stephen "Beetle" Bailey, 35 Squadron Warrant Officer, with John Sambrooks, the RTFV-35 Sqn Association's Secretary.

(Click [HERE](#) for Beetle's theme song [volume up].)

WOFF Stephen Bailey was born in Dec 1958 and joined the RAAF in May 1977 as a Supplier. He remustered to Loadmaster in May 1986 and had postings to 5SQN, 37SQN, AMTDU, back to 37SQN, 33SQN, AMTDU again and finally back to 33SQN. He took a discharge in August 2007 but re-enlisted in Jan 2009 and was posted to 285Sqn (Herc training), 37Sqn and finally 35Sqn. He took a discharge again in December 2014, and has stayed on in the Reserve.





John McDougall and Paul Smith.

Paul, who lives in Brisbane and who is an ex RAAF bod, has done a lot for the Association. Paul is pretty good with his hands and he spent many hours building the model DC-3 from scratch for 35 Sqn.

In recognition, and as a grateful thank you, John McDougal presented Paul with a plaque representing the passing of the baton from the 35 Sqn of yesterday to the 35Sqn of today.



After the welcoming and presentations were out of the way, it was time to bring on the food, and the RSL did itself proud. The quality and quantity of food was excellent – thanks to that well known old framie, Ken White who is on the RSL committee and who organised it all.





When the food was served, the People's Champion and his lovely lady Andrea, strategically positioned themselves at the end of the line to keep a watchful eye on the participants – to make sure no-one took two sangas.



After the food had been smashed it was time to bring out the balloons for the balloon race. The rules are simple, two or more teams are selected, no limit to the number of people in each team provided they are equal. Participants tie a balloon to their backs and line up at one end of the





room. The leader in each team runs to the other end of the room and grips a chair. The second person in each team then runs to the first and gripping the leader tries to burst the balloon by squeezing it between their two persons. When the balloon is burst, the leader runs back to the start and the third person tries to burst the balloon tied to the second person – and so on. The winning team is the first to have all the balloons burst.



All was going well until the scrutineers discovered both teams were stretching the rules a little. The RSL had served up delicious chicken kebabs on pointy skewers, and some unscrupulous team members had spirited these away on their persons and unbelievably had used the sharp end of the skewer to dispatch the balloon. The winning team had been promised a priceless 35 Sqn Association biro each, and we think the attraction of winning this magnificent prize was too much for the participants to wear.

It was all good fun, click the pic above to see a small video of the event.

Saturday was the reason we all headed for Richmond, Saturday was the day the 35 Sqn colours (or standards) would be taken from the cupboard at Point Cook where they had been stored since 2009 and brought up to Richmond to once again take pride of place in the Squadron's brew room.

There is a lot of tradition behind the carrying of military colours, they are not just another flag carried by a group of service personnel.

The practice of carrying the colours, both to act as a rallying point for troops and to mark the location of the commander, is thought to have originated in Ancient Egypt some 5,000 years ago. The Roman Empire also made battle standards a part of their vast armies. Carrying the standards (or colours as they became known) was formalized in the armies of Europe in the High Middle





Ages, with standards being emblazoned with the commander's coat of arms. In the age of line tactics, the unit colour was an important rallying point for infantry soldiers.

As armies became trained and adopted set formations, each regiment's ability to keep its formation was potentially critical to its success. In the chaos of battle, not least due to the amount of dust and smoke on a battlefield, soldiers needed to be able to determine where their regiment was. Flags and banners have been used by many armies in battle to serve this purpose. Regimental flags were generally awarded to a regiment by a head-of-State during a ceremony and colours may be inscribed with battle honours or other symbols representing former achievements. They were treated with reverence as they represented the honour and traditions of the regiment. The loss of a unit's flag was not only shameful, but losing this central point of reference could make the unit break up, so regiments tended to adopt Colour guards, a detachment of experienced or élite soldiers, to protect their colours. As a result, the capture of an enemy's colours was considered as a great feat of arms.



Due to the advent of modern weapons and subsequent changes in tactics, colours are no longer used in battle, but continue to be carried by Colour Guards at events of formal character.

These days, the Colour Guard refers to a detachment of military persons assigned to the protection of the regimental colours. This duty is considered so prestigious that the colour is generally carried by a young officer while experienced non-commissioned officers are assigned to its protection. These NCOs, accompanied sometimes by warrant officers can be ceremonially armed with either sabres or rifles to protect the colour which is always treated with the utmost respect and veneration. Colour guards are generally dismounted, but there are also mounted colour guard formations as well.



The Colours are never capriciously destroyed – when too old to be used they are replaced and then laid-up in museums, religious buildings and other places of significance to their unit.



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We have to thank the lovely Veronica O'Hara, from Air Force Imagery, who spent the day and night strapped to a bunch of cameras and who graciously made some of these pics and the video available to us.



The Commanding Officer of 35 Squadron, Wing Commander Bradley Clarke, OAM takes command of the parade from Executive Officer 35 SQN, Squadron Leader Wayne Baylis.



Chaplain Squadron Leader Yogananda Juste-Constant blesses the Squadron Colours.

A bunch of lawyers were sitting around the office playing poker.  
"I win!" said Johnson.  
Henderson threw down his cards. "That's it! I've had it! Johnson is cheating!!!"  
"How can you tell?" Phillips asked.  
"Those aren't the cards I dealt him!"



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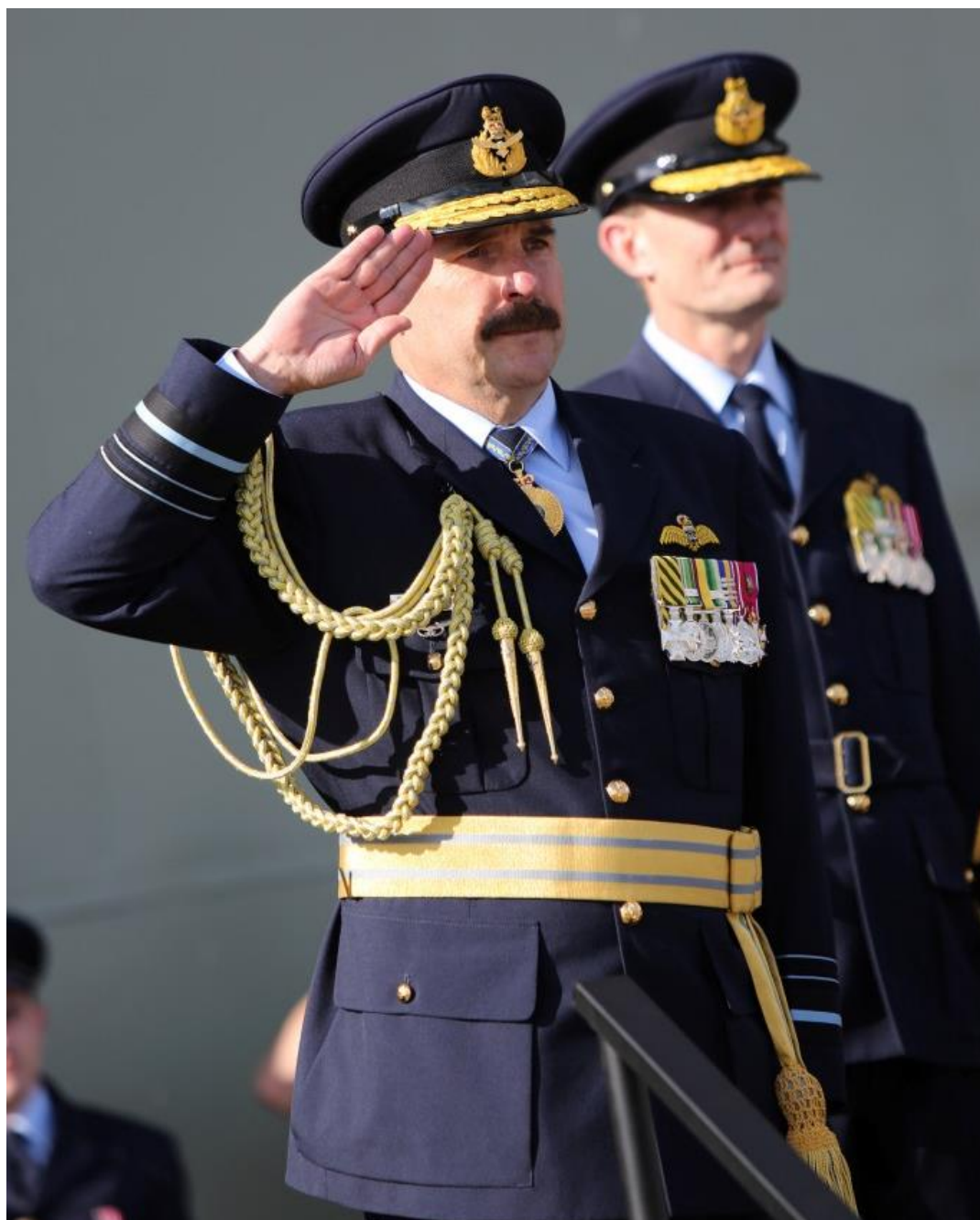


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Colour Bearer, Flying Officer Lawrence Normoyle marches the Colours back to the Colour Party after being re-dedicated.



The Chief of the Air Force, Air Marshal Gavin 'Leo' Davies, AO, CSC  
receives the General Salute from 35 Squadron.

Click [HERE](#) to see a short video of the parade.





Some of 35 Squadron's "Old Boys" who made the journey to Richmond to witness the momentous event.



**L-R:** Richard Jones (EngO), John McDougall (Loady), Don Payne (Sumpie), Ken "Aussie" Pratt (Loady), Peter Rothwell, Stew McAlister (Pilot).

A lady goes to the bar on a cruise ship and orders a Scotch with two drops of water. As the bartender gives her the drink she says, 'I'm on this cruise to celebrate my 80th birthday and it's today..'The bartender says, 'Well, since it's your birthday, I'll buy you a drink. In fact, this one is on me.' As the woman finishes her drink, the woman to her right says, 'I would like to buy you a drink, too.' The old woman says, 'Thank you Bartender, I want a Scotch with two drops of water.' 'Coming up,' says the bartender. As she finishes that drink, the man to her left says, 'I would like to Buy you one, too.' The old woman says, 'Thank you. Bartender, I want another Scotch with two drops of water.' 'Coming right up,' the bartender says. As he gives her the drink, he says, 'Ma'am, I'm dying of curiosity. Why the Scotch with only two drops of water?' The old woman replies, 'Sonny, when you're my age, you've learned how to hold your liquor. Holding your water, however, is a whole other issue.'



The Governor of NSW, His Excellency General the Honourable David Hurley, AC, DSC reviews the parade. Prior to his appointment as Governor, David Hurley served for 42 years in the Australian Army, concluding his service as the Chief of the Defence Force. He was awarded a Companion of the Order of Australia in 2010 for eminent service to the Australian Defence Force and a Distinguished Service Cross for his leadership during Operation SOLACE in Somalia in 1993.



The mighty old DC3, once A65-94, now called VH-EAE and which is flown and maintained by [HARS](#) (just south of Wollongong), also came for the parade. This aircraft, one of two owned by



HARS, was built in 1945 and was delivered to 3AD. It was transferred to 38 Sqn in 1950, then to 36 Sqn in 1953, then back to 38Sqn in 1973. From there it went down to Laverton (in 1980) then to East Sale for storage in 1981 and was finally sold to HARS for the princely sum of \$6,000. HARS set to work and restored it and it now flies all over the country to various aviation themed events,

During its life with the RAAF, it was flown in New Guinea and the South West Pacific theatre during WW11 and in May 1963 it became part of C flight, 2SQN, based at Butterworth. From there it flew the first operational mission of the Vietnam War, delivering food and medical supplies to refugees fleeing the fighting.



The other HARS aircraft that came in formation with the Dac was the trusty old Caribou. Retired from active service back in 2009, this particular aircraft, A4-210, served with 35 Sqn in Vietnam from March 1965 until July 1968 when it ran into a newly filled in ditch at Dalat. It was loaded onto HMAS Sydney and shipped back to De Havilland's in Bankstown for major repairs after which it was back on line with 38 Sqn where it used to scare the pants off everyone who flew in it as it had the bad habit of wanting to fly upside down whenever 40 flap was



selected. Eventually, after it was discovered that De Havs hadn't put the wings back on correctly, and further repairs were carried out, it started to behave itself and today it delights aviation buffs all around the country.

Nestled between the two old ex-38Sqn work-horses, the new kid on the block sat under guard, just itching to get to work. At the moment A34-001 is the sole example but it should have a mate later this year. A bunch of 35 Sqn personnel are packing for the trip to the US to learn the aircraft and next year should see a full back line at Richmond before the whole lot are boxed up and moved to Amberley. Makes you wonder whether Richmond has a future after that, the Windsor/Richmond area has grown enormously since we all left in the 70's and you can bet there are noise problems associated with operating 12 Hercs in the middle of suburbia. You can also bet someone has thought of having 35, 36 and 37 all at Amberley.



After the ceremony had ended, the aircraft were opened for public inspection, much to the delight of the crowd who patiently queued up to get inside.





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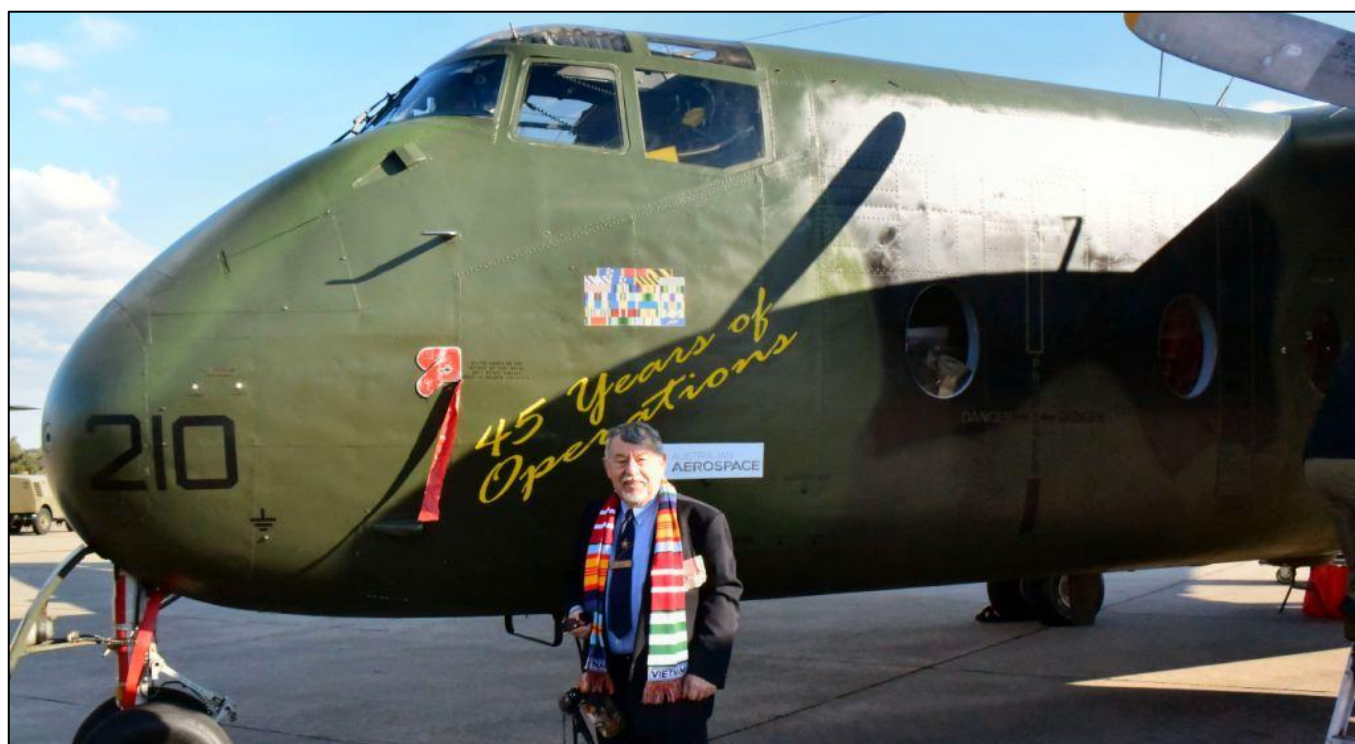
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Even Bou, who, a bit like Don Payne, is not normally interested in anything that doesn't have two noisy old round engines bolted on the outside, couldn't help himself and had to see what all the fuss was about.



Ted McEvoy, the RAAF's second best Radtech, with the Caribou.





After everyone had had their fill of aircraft, the populous were bused to the Sgt's Mess for the evening's festivities, then with everyone seated, "Beetle" Bailey took to the stage and read the riot act – the rules for the night were, "There are no rules, enjoy!!!"





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The RAAF Band, which always does an excellent job, entertained the troops for the night.







Early in the night it was a time for some thanks and a time for some giving. Brad Clarke, the CO of 35 Sqn thanked Beetle Bailey, the Sqn WOD for organising the whole affair, he thanked everyone for making the effort and coming along, (some blokes came from as far away as Perth), and he thanked Bob St John for his many years of service to RAAF aircraft as a loady. Bob was on one of the first Caribous out of De Havs in Canada and was on one of the first to go to Vietnam (29 August 1964), he went back again in June 1965, again on the Caribou, then on his return to Oz, he was posted to 37 Sqn which then had E Model Herc and he made another 33 trips back to Vietnam, surely a record.



After he left the RAAF he joined HARS as the boss loady on their Caribous and that weekend he crewed 210 up to Richmond for the 35 Sqn celebration. Bob saw 70 some years ago now and he reckons this might be his last trip.

A wonderful effort and definitely worth a special mention on the night.







With all the thanking out of the way, it was time for some serious giving.

On behalf of the RTFV-35Sqn Association, John McDougall, the President, presented Beetle with a commemorative plaque depicting the passing of the baton from the Caribou to the Spartan and thanking him once again for his efforts in putting the weekend together. We thought we overheard some in uniform suggesting this was probably the first time they had seen Beetle speechless and wondered if John was available for more presentations later in the week.



John also thanked Brad Clarke for inviting the Association to the Event and for making everyone feel so welcome.

It was then Brad's turn to hand out some goodies. Everyone who had served with 35 Sqn in Vietnam was presented with a token indicating membership of the Spartan Club.



One such worthy recipient of the token was Reg "Rocky" Rockliff, the past Patriarch of both 35 and 38 Squadrons. (See his story [HERE](#)). Rocky was the EngO with both Squadrons and is well known to thousands of people and we're yet to hear anyone speak



anything but praise for the old codger. Although he's looking forward to his 93rd birthday this October, he's still as sharp as a tack, still great company, still got that devilish sense of humour, always got heaps of yarns to tell and we hope we're still around when he gets the telegram from the Queen because that will be a party.



"Rocky" Rockliff receiving his Spartan Club Token from the 35 Sqn CO, Brad Clarke.

The RTFV-35 Sqn Association had been approached by a Alf Boyd who was one of the early members of 35 Sqn and who had written his memories of the formation of the squadron (See [HERE](#)). The Association had the story printed and bound and John McDougall presented it, along with other relevant material, to the Sqn CO, Brad Clarke, for display in the Sqn's Brew Room.





John McDougall presents Brad Clarke, 35 Sqn CO, with a copy of Alf Boyd's memories.

Then, when all the giving had been given, it was time to party, a few of those partying included:



Nev Conn and Allan George - comparing notes.  
Both of these blokes retired with the rank of Group Captain.



Ken Davies.



Rocky and Allan George.



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Lois Russell and Peter "Dit" Eaton.



Trev Benneworth and Kim Roots.

And while most of the revellers behaved, some didn't....



John Broughton.... "If you can't find a body....."

Food for the revellers was provided in the form of gourmet Pizzas. A number of ovens had been set up in a marquee on the grass at the back of the Mess and a continual stream of Pizzas were delivered to the tables. Different!!





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Then, on Sunday, after the festivities of the night before, a group of troops and their lovely ladies assembled at Boots Bar and Restaurant in Windsor for sick parade.





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Kim Little and Ian "Beetle" Bailey.



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Dan Nebauer, Wally Little



Pat and Gary Kimberley.



John Boyne – some ate a hearty breakfast.

Allan George couldn't believe the size of it.







Then, after sharing dinner at the Clarendon Hotel on Sunday night, it was back to the digs, pack the bags in readiness for an early departure on the Monday.

A great weekend was had by all, thanks heaps to 35 Sqn for putting it on and for inviting us along to share it with you.



HMAS *Toowoomba (II)*, whose home port is [HMAS Stirling](#) in the West and whose motto is *Fearless*, is the seventh of eight Anzac Class long range guided missile Frigates built for the Royal Australian Navy by Tenix Defence Systems in Williamstown, Victoria. Two have also been built for the New Zealand Navy. At the time, Australian shipbuilding was thought to be incapable of warship design, so the RAN decided to take a proven foreign design and modify it. These ships are a rough copy of the German Meko 200 Frigate. Their modular design allowed sections to be constructed throughout Australia and New Zealand with all the pieces brought to Williamstown for final assembly. The first frigate of this type, the HMAS Anzac, which is numbered FFH150, (the FFH standing for Fast Frigate Helicopter) was commissioned in May 1996.

Australia received its ships as below:

Ship	Pendant Number	Launched	Commissioned
Anzac	FFH 150	September 1994	May 1996
Arunta	FFH 151	June 1996	December 1998
Warramunga	FFH 152	May 1998	March 2001
Stuart	FFH 153	April 1999	August 2002
Parramatta	FFH 154	June 2000	October 2003
Ballarat	FFH 155	May 2002	June 2004
Toowoomba	FFH 156	May 2003	October 2005
Perth	FFH 157	March 2004	August 2006

Each ship is 118 metres long, 14.8 metres wide and needs 4.35 metres of water so as not to scrape the bottom. Fully laden they weigh 3,600 tonnes. They will run all day at 18 knots and if needed can reach speeds in excess of 25 knots.





We would think being in a warship and all alone out in the middle of the ocean would put the men and women who operate the ship in some uncomfortable and scary situations so it's not surprising that the builders very wisely included some super sophisticated equipment to ward off the bad guys. These include an advanced package of air and surface surveillance radars, omni-directional sonar, a mine avoidance sonar and electronic support systems which talk with state-of-the-art black boxes. Knowing who is coming after you is all well and good, but unless you have the facilities to convince them to stay away, your future wouldn't be all that good.



*Toowoomba*, and the rest of her Class, can counter simultaneous threats from aircraft, surface vessels and submarines all at the same time. They are fitted with one 5-inch (127 mm) gun capable of firing 20 rounds per minute, Harpoon anti-ship missiles, ship launched torpedoes and a vertical launch system for the Evolved Sea Sparrow anti-air missile. It also carries the [Nulka active missile decoy system](#), off-board chaff and a torpedo counter-measures system.

Normally the ship carries 22 officers and 141 sailors.

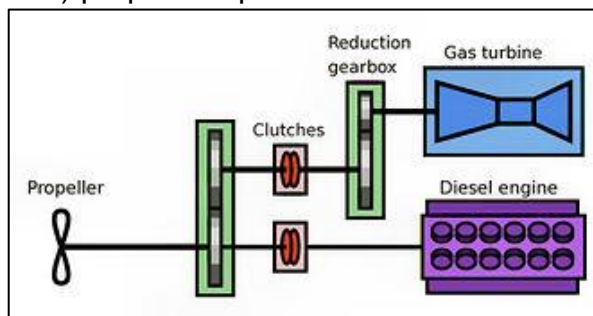
Each ship also carries its own multi-role Sikorsky S-70B-2 Seahawk helicopter for anti-submarine, anti-surface warfare and search and rescue (SAR) capabilities. The Seahawk, of which the Navy has 16, is a naval version of the Army's Blackhawk and these aircraft have been around since 1988. The Seahawk's main weapon is the Mk46 anti-submarine torpedo. Navy did plan to replace them with the Super Seasprite but that plan was ditched in 2008 after huge tech problems and cost over-runs sent it to the "too hard basket."



The 17-year, fixed-price contract to build these ships, valued at approximately AU\$6 billion, was one of the largest and most successful Defence contracts ever awarded in Australia. From

March 1996 to June 2006, 10 Anzac Class ships were delivered on time, on budget and to specification.

They are powered by a [combined diesel or gas](#) (CODOG) propulsion plant which enables them to sustain speeds of greater than 25 knots and allows an operational range in excess of 6,000 nautical miles at 18 knots. The CODOG system works much like a Toyota Prius in that it consists of two separate and different engine systems which can be used independently or together. Toowoomba has two 8,840 hp diesel engines as well as a 30,170 hp gas turbine engine. Normally the ship would run on its diesels, each one driving a variable pitch propeller, but when extra speed is needed, the gas turbine is cranked up and through a system of clutches, can input the extra power needed to propel the ship at the required increased speed.



The Spirit of Tasmania, which is 30,000 tonnes, can easily cruise at 27 knots – oh well!!!

In 2007, Toowoomba was deployed to the Persian Gulf as part of Operation Slipper. In June 2009, she sailed from HMAS Stirling for her second Middle East deployment and in September, was assigned to Combined Task Force 151 (CTF-151). She was the first Australian warship to work with CTF-151, a US-led, multinational force tasked with protecting merchant vessels from pirate attacks off the coast of Somalia.

HMAS Toowoomba is the 58th Australian warship to deploy to the Middle East since the first Gulf War in 1990.



In support of a United Nations Security Council Resolution, she was assigned to escort merchant shipping and conduct patrols in the International Recommended Transit Corridor (IRTC), a shipping lane extending the Gulf of Aden towards the Somali Basin and the Horn of Africa. On the 20<sup>th</sup> September 2009, she responded to a call for assistance from the merchant vessel BBC Portugal and successfully prevented an act of high-seas piracy. A Japanese P-3 Orion aircraft and a naval helicopter from the German frigate Bremen provided surveillance support while Toowoomba closed in. A boarding party from Toowoomba confiscated several weapons from the attackers before the skiff was directed to leave the IRTC. While in the region, Toowoomba conducted 20 boardings, spending more than 240 hours inspecting dhows transiting the region, which ultimately saw her seize in excess of half-a-billion dollars (Australian) worth of narcotics which would have otherwise funded terrorist operations.





These drugs are put through an on board munching system then dispersed into the prop wake at the back end of the ship where they instantly and harmlessly disperse.

She returned to Stirling in December 2009, having been relieved in the MEAO by her sister ship, HMAS Stuart. The ship and her company were awarded with a "Certificate for Exceptional Services Rendered to Shipping and Mankind" by the International Maritime Organization in November 2009. In early April 2013, Toowoomba operated with the U.S. Navy's Carrier Strike Group Three in the South China Sea then in March 2014, she was pulled from asylum seeker patrols and directed to join the hunt for the missing Malaysia Airlines flight MH370.

On the 4th June, Toowoomba arrived in Brisbane for a week long visit, after another tour of the Middle East. On the 6th June, the ship's crew travelled to Toowoomba for a celebration. The event was a Freedom of Entry ceremony, a custom based in Medieval times bestowing the honour of welcome to a group of armed troops. Cities in those times had to be very careful of allowing large bands of armed men within the city walls after bitter experience showed it was just as likely that the city would be sacked and plundered as protected. Freedom of Entry to a city was a huge honour for a group of armed forces which would otherwise have had to spend the night outside the city walls without access to food, beds or supplies. HMAS Toowoomba's Commanding Officer, Commander Cath Hayes, was issued the "Keys" by Queensland Police Commissioner Ian Stewart before being welcomed into the city.



## **Commanding Officer      Commander Cath Hayes.**

Commander Cath Hayes was born and raised in Diamond Creek in Victoria, she joined the Royal Australian Navy in 1992 via the Australian Defence Force Academy where she studied for and was awarded a Bachelor of Science majoring in Oceanography. On completion of University studies Midshipman Hayes commenced Seaman Officer training at HMAS Watson, during this time she was promoted to the rank of Sub-Lieutenant.

In 1996 Sub-Lieutenant Hayes was posted to HMAS Darwin where she achieved the award of a Bridge Watch-keeping Certificate in 1997. She was promoted to Lieutenant in January 1998 and completed Minor War Vessel Navigation Course



before joining HMAS Geelong as the Navigating Officer in late 1998. After two years as the Navigator of Geelong she undertook a short period as Assistant Principle Warfare Officer in HMAS Arunta before undertaking Principle Warfare Officers Course in 2001.

In 2002, upon graduation from Principle Warfare Officers Course as an Air Warfare specialist, Lieutenant Hayes joined NUSHIP Stuart in the final stages of build at Williamstown Dockyard as the Operations Officer. This posting was interrupted by a short notice posting to HMAS Melbourne for training and deployment to the Arabian Gulf on Operation SLIPPER. Lieutenant Hayes returned from Operation SLIPPER to take up a short posting as the FFG Capability Requirements Manager at the Surface Combatant Group before joining HMAS Sydney in 2003 for a further deployment to the Arabian Gulf on Operations SLIPPER and FALCONER.

Lieutenant Hayes joined HMAS Kanimbla in January 2004 as the Operations Officer and was selected for promotion to Lieutenant Commander in December 2004. Following the 2004 Boxing Day Tsunami she deployed in Kanimbla to Sumatra as part of Operation SUMATRA ASSIST, to provide humanitarian assistance in Banda Aceh and later to provide humanitarian assistance to Nias Island following a subsequent earthquake. Lieutenant Hayes received a Deputy Commander of Joint Operations Commendation for her work as the Operations Officer of Kanimbla during Operation SUMATRA ASSIST.



Lieutenant Commander Hayes assumed Command of Armidale Class Patrol Boat Crew ATTACK FIVE in March 2006. In April 2006 she briefly deployed with the ground forces to the Solomon Islands as the Maritime Liaison Officer for Operation ANODE II, before rejoining her Crew. In June 2006, she was promoted to command HMAS Armidale and during her subsequent 18 month in Command conducted patrols in support of Operation RESOLUTE in HMA Ships Armidale, Bathurst, Albany and Ararat.

She was awarded the [Peter Mitchell Prize](#) as the most outstanding officer in the RAN for 2007.

In 2008 she joined the Joint Amphibious Capability Implementation Team which is coordinating the introduction into service of the Australian Defence Forces new amphibious capability. After completing Staff College in 2009 she was posted to the position of Staff Officer to the Vice Chief of the Defence Force and was subsequently promoted to Commander in January 2011 and was posted as the Deputy Director Surface and Air Warfare in Navy Strategic Command. In this position she was responsible for developing capability needs for Navy's future Surface and Air Warfare and Afloat Support capability replacement programs and was the lead negotiator and planner for the deployment of Spanish Armada Ship SPS Cantabria to Australia in 2013.





Toowoomba left Brisbane on the morning of the 10<sup>th</sup> June and will probably reach HMAS Stirling in about 10 days where she will be tied up for a while undergoing repairs and an equipment upgrade. A skeleton crew will remain with the ship but most will be posted off to different ships or other shore stations. Commander Hayes assumed her current post as the Commanding Officer of HMAS Toowoomba on the 19th July 2013 and upon reaching Perth, she too will be leaving Toowoomba for a different command.

As Toowoomba had a brief stay in Brisbane, we thought it would be an ideal opportunity to have a look over the ship and let you know what it is like. Once again, we contacted the very helpful MediaOps in Canberra who put us in touch with Paul Lineham who is the ADF's Regional Manager Public Affairs for Southern Queensland and Paul made it happen.



Early Wednesday morning 10 June, at the un-Godly hour of 7.00am, John Griffiths and I were met at the gate to Hamilton Wharf's Pier 4 by Lieutenant Commander Ed Ellison (that Sqn Ldr in the real money) who is the XO (2IC) on HMAS Toowoomba.

After a brief check-in at the "guard room" we boarded the ship via the gang way at the "back end" and surrendered our licences in return for a visitor's pass. We were then shown below decks, via some pretty steep stairs, to the Seaman's Mess, which they call the Galley where a very generous breakfast was being served and to which we were invited to partake.



You hear lots of stories about military food, the RAAF was always thought to have the best, but we

don't think that is the case anymore.

Today, possibly because of economies of scale, both the RAAF and the Army are fed by contractors and although they do provide healthy and nutritious meals for the troops, at the back of their minds these companies have to be thinking about profits and the best way to maximise profits is to minimise costs. On this ship, the catering people, cooks and the stewards are all Navy - and it shows. We lined up with the rest of the ship's crew and although there was an excellent choice displayed in the Bain Marie, we were surprisingly asked "what sort of eggs would you like" – and when you voice your choice, Corey Lewis, the ship's cook, goes over to the stove and prepares your breakfast for you, just how you wanted it – just like they used to do at Brookvale all those years ago, in another Air Force.



Corey Lewis, cooking my medium soft poached eggs.

Corey Lewis is from Golden Grove South Australia. 4 years ago in August he decided to join the RAN and surprisingly, the interval from the moment he applied until his enlistment was only 6 months. Corey says as he's an only child, it hit his mum pretty hard but he says she's very proud to have a son in the Navy. Corey is a Maritime Logistic Chef. Maritime Logistic Chefs are responsible for the preparation of food for the Navy at all times and in all conditions both ashore and afloat, in surface ships and submarines, including:

- Compilation of provisions orders to meet requirements;
- Management of the budget for the Navy's victualling system;
- Calculation of the volume and type of provisions required by the galley to meet the requirements of the menu;
- Operation of galley (kitchen) equipment, menu planning, and
- Preparation, cooking and presentation (serving) of all foods including meats, breads, cakes, pastries, sauces, vegetables and sweets.

Chef personnel at sea may also form part of the Ships Medical Emergency Teams (SMET) and be involved in the provision of first aid and medical treatment to casualties in exercise and real time situations.





Corey completed a 6 months Tafe course at the Frankston campus in Victoria and was then posted to HMAS Cerberus in Victoria for a year for on the job training. After 12 months, he was posted to Stirling in WA and says he couldn't be happier, Perth, he says, is a beautiful city and reminds him very much of Adelaide. About 6 months after arriving at Stirling he was posted on board HMAS Toowoomba where he's been now for almost 18 months. He said they have had a lot of sea time, doing several deployments in 2014 and travelling around Australia in 2015 and now that the ship is heading home for a refit he will spend a bit of time back on firm ground. His goal, he says, is to transfer to a Naval Police Coxswain and further develop his skills as a sailor.

But, at the moment, being the ship's cook— he is, of course, one of the most popular blokes on board. What do they say? The first two people you get to know when posted to a new unit/ship is the pay clerk and the cook.



John Griffiths lining up for breakfast.

Although the food is excellent and plentiful, the dining areas are not – due obviously to the lack of space on board the ship. There are just not enough room to install enough tables and chairs to cater for the whole crew in the one sitting. Meals are taken in shifts, with sailors on a roster system.



Breakfast starts at 0645 in the morning and is all over by 0730. Lunch starts at 11.30 and by 12.30 if you're not there you miss out. Dinner at night starts at 1730 and by 1830 it's all over. The messes are left open after serving meals are finished and blokes and blokettes can get coffee, tea, milo, cordial, fruit, toast and spreads at any time and blokes like Corey will often prepare surprise 'mornos' or 'arvos', things like fresh muffins or baked scones, for the entire crew. Click [HERE](#) to see a typical menu.

If you feel like a late night snack before hitting the sack, there is an on-board canteen, once again run by Navy Stewards, not a civil organisation as is the case with the Army and Air Force (AAFCANS). The Canteen sells most things, soap, toothpaste, smokes, soft drinks, chips and you can grab a packet of Tim Tams too if you wish.

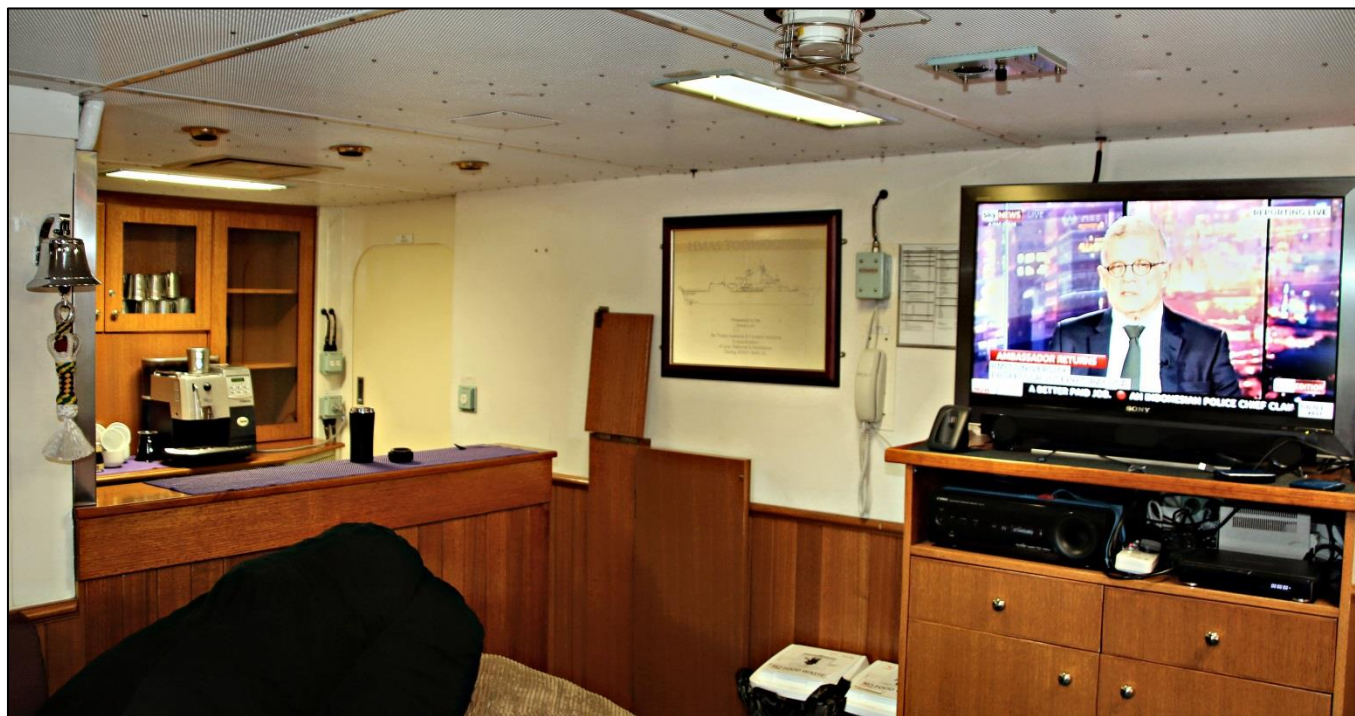
Two cows were standing in a paddock, one cow said to the other, "what do you think about this mad cow disease?". The other replied, "I don't know and I don't care, I'm a helicopter!".

Once we had been served our breakfast, we moved up to the Officers' Wardroom (Mess) to sit and eat as the Sailor's Mess was full. The Officers' Mess is further towards the front of the ship, (the bow) and one level higher, so it has its own kitchen and Stewards to serve and clean up. Conditions for both Sailors and Officers are excellent.



Adjoining the Officers' dining area is a small recreation area which can also double as a 'wet' bar. In Australia, while at sea, sailors are allowed 2 beers a day but only at the discretion of the CO and each morning each and everyone is "brethoed" with the acceptable limit being 0.03 and below. Go above that and you're in for the high jump.





After breakfast and a great cup of coffee, it was on with the tour. Next stop was the medical centre. Ships don't carry a doctor but do have a trained medic(s) who, if need be, has the capability of stabilizing a "patient" on board for up to 72 hours until that person can be medivac'd to a hospital, either by helicopter or boat if at sea, or by ambulance once tied up.

We met Amber Mayes who is the Petty Officer (Sergeant) Clinical Manager (Medic) onboard HMAS Toowoomba. Amber grew up in Brisbane and joined the Navy 15 years ago which was, she says, the first time she had left home. She has been on Toowoomba for 6 months and says looking after 170 persons certainly is challenging. Day to day problems she would deal with include colds, sporting injuries, and some emergency injuries like bumped heads ("some of the taller guys forget to duck") and recently she has had a few finger crush injuries due to the ship's hatches (doors) being quite heavy and in rough weather people get their fingers in the way and end up with bruised/battered fingers. We did notice a prominent sign on every door saying "Use two hands when opening/closing door" – now we know why!.

Amber says she is looking forward to returning back to Perth where her husband and 4 year old son are. The family are then relocating to Cairns at the end of the year where she will take up a position on a Hydrographic Ship which only has up to 60 people onboard, so a huge change in workload! But, she says, "I'm looking forward to the hot weather, camping and spending more time with my family".



Amber Mayes, in the ship's sick bay.

We asked her whether sea sickness was a problem and she said that some of the newbies get sea sick until they get used to the motion, every ship moves through the water differently. She said sometimes she still gets sea sick, especially when the ship hits rough weather, or if she hasn't been at sea for a while – “then I'm normally ill the first day”. She can give out sea sickness medication like Travel Calm or Avomine which is pretty effective, but “it makes you a little drowsy but nothing that coffee can't fix!” If things are really bad, they can give the patient an injection which stops the vomiting but doesn't stop the sick feeling.”

She said, “sometimes they get the odd person who just can't handle the motion in small ships, they try every type of medication, motion bands, ginger, everything and eventually they end up having to try a different class of ship, something bigger like HMAS Choules or our new LHD class ship HMAS Canberra. If they still suffer on there, they more than likely will transfer to the Airforce or Army. We give them the best opportunity, we don't want people to leave the Navy, so if it means they have to move to the other side of Australia to try a different class of ship, then we do it!”





The ship has sea sickness beds onboard. With these beds, you remove a pin and the bed gimbals, much the same way as a hammock, That would stop the side to side mothing, but nothing stops the up and down movement.

Another problem is land sickness - sounds silly, but when you are at sea for quite some time, and you finally get ashore, you still feel as if the ground is moving. This normally subsides after a day or so, but can be quite annoying and some people still get sick from this..

“Why do we do it! haha.. Because it's a great organization, the travel is amazing, and the people are even better!”

We left the sick bay and met Cameron Turner, Cameron is a fire control officer, as you would imagine a very important job on a war ship. Cameron offered to show us his “home away from home” for which we were very grateful. Blokes live at one end of the ship, girls at the other and once again, with room at a premium, the builders have jammed as many people into a confined space as is possible.



Everyone has their own space, there are no “hot” beds on this ship, Cameron's is the bottom one. There is actually more room between beds than appears from the photo (*Click the pic for a bigger view*).

There are no ladders to get into the top bunk, sailors usually grab a rail that runs across the top and swing up – that one is definitely a young man's/woman's bed.

Each sailor has his/her own locker, it is only small as it has to fit into this very tight living space but Cameron assures us it is big enough to carry all his Navy gear as they don't wear civvies while on board. Civvies and other items not needed everyday are stored away in a central lockup.

With the ship running 24/7, Cameron and his mates have to start watch at all hours and the trick is to get out of your bunk, have a tub then get dressed without waking the blokes who have been relieved and are enjoying a snooze. They get good at it, everyone looks after and pays heed to everyone else and rarely is there a problem.





Keeping fit is an important requirement for everyone on board. Some of the ladders are pretty steep and most galley ways are narrow and if/when things warm up, an unfit person would have trouble getting from A to B in a hurry. Navy personnel are required to pass an annual fitness test and are encouraged to participate in sporting activities which are incorporated into a normal working day. The ship also carries quite a lot of gym equipment and everyone is "urged" (as only the Military can urge) to use the gear as often as they can.

Blokes and Blokettes can spend up to 2 years on a ship, but with the ship calling into port for regular equipment upgrades, repairs, blokes/blokettes undergoing further shore training, 2 years' service on the one ship is more rare than the norm.

***Cameron Turner shows us around his home away from home.***

And being at sea does not mean the ship's crew are isolated from the rest of the world. Navy has an arrangement with Optus, called "Quantity of Life" which makes sure that

internet and email facilities are available. As well as personal email there is a service called 'Swimline'. When a ship is overseas, Swimline allows those on board to receive messages from family and friends which are played over the ship's main broadcast system. And of course, when in port, or close to land, you can use your mobile phone to contact friends and loved ones. TV is also available, though the number of channels is limited.

Pay and conditions are excellent, bokes/blokettes serving on a ship receive an extra 2 weeks leave – making 6 weeks in total each year. You can also receive another week as leave in lieu to compensate for any additional time spent carrying out official duties after hours or on weekends. After ten years of service you become eligible for 3 months long service leave.

An LC (Leading Seaman - Cpl equiv) would receive an annual salary from \$52,530 (pay scale 1) to \$88,086 (pay scale 10). As well as that, each LC receives the Service Allowance of \$12,924pa, a uniform upkeep allowance of \$419pa and while at sea receives a Seagoing



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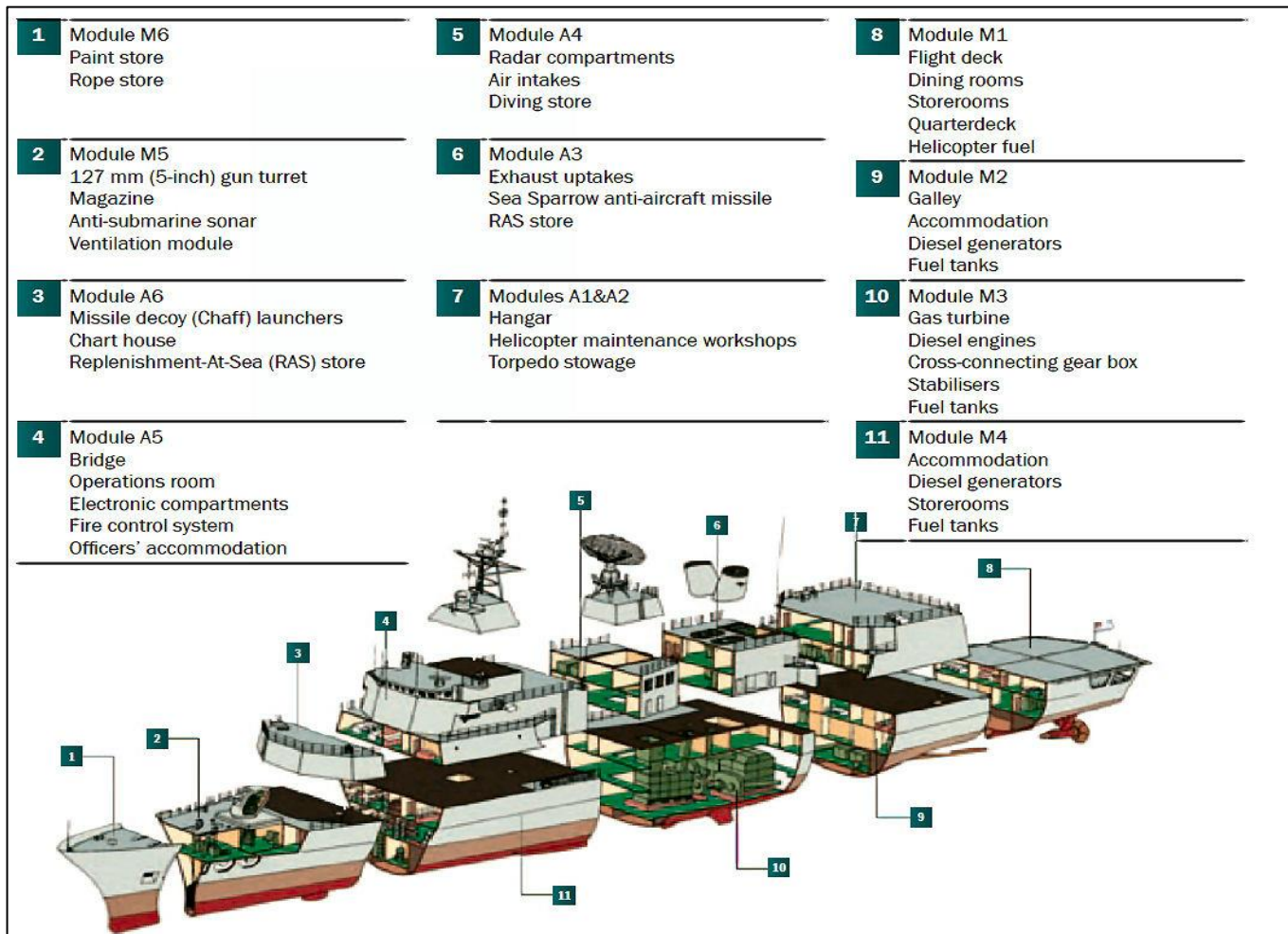
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Allowance of \$12,924pa. A group 6 LC (middle of the road), serving on board receives an annual salary of (\$59,987 + \$12,924 + \$419, + \$12,924) \$86,254pa. If the LC is a diver there are allowances for each dive they do, if they are on a submarine, there is an allowance for that too.

No wonder everyone we met had a smile on their faces.

When the ship is in port, you receive your mail and might also receive care packages from family and friends that can include anything from home cooked snacks, to recorded copies of your favourite TV shows.



The break up of the ship!



LCDR Ed Ellison, (who gave of his time to show a couple of old EX-RAAF bods around his ship,) with John Griffiths.

Toowoomba may be coming up to her 13th birthday but looking at her, she looks as good as the day she slid away from Williamstown dockyard. Thanks to a very well-oiled operational crew, Toowoomba is shipshape and just back from a very productive tour Up Top. From the junior sailors to the senior officers, all that we spoke to were proud of their ship, the Navy and their traditions. Balcony cabins were missing in this fit-out but the scran made up for it on the Mess Deck. Navy has it all over Army and Air Force messes when it comes to good tucker. Eggs to order. None of this tray of greasy fried eggs getting cold.

In no time at all, or so it seemed, the morning had got away from us and Toowoomba was getting ready to depart – and as we weren't invited, it was time we took our leave.





We worked our way to the rear of the ship, where the helicopter lands and is hangared. There is not a lot of room here and trying to put the aircraft down on the dot, in rough seas, would be a fantastic achievement.



Our guide for the morning was LCDR Ed Ellison who has a wealth of knowledge all derived from his 30 years Navy service, including time in the lower decks. A great way to understand the crew. It was interesting to hear the controls and restrictions on recycling and trash to minimise our footprint on our planet. Flammable goods on board are obviously a major hazard at sea and the choppers are faced with coming back to roost with minimum fuel if they have been doing a traps run alongside, picking up that dreadful AVTUR. A dead giveaway that we were on one of Her Majesties Warships and not a Princess Cruise liner was the strategically placed batches of Oregon to plug any holes that those nasty Sea Riders had planned to test the crew in one of their many Evaluation Evolutions. Our HMAS Toowoomba passed with Flying Colours on their very recent Limited Notice Inspection. Given that she had just come back from Up Top and the crew was looking forward to some time at home, what a great time to put them to the test. Come to think of it, I think the Navy has come a long way.

A happy ship is a good ship and it was pretty obvious from all we spoke to, the ship is very happy. A big Thank You to all involved in making this tour possible, especially MediaOps, Paul



Lineham and Ed himself. And a big thank you too to the CO, Commander Cath Hayes for allowing us on her ship on the morning everyone was flat out getting ready to depart.

It certainly was different, turning to face the steps before going down. I just wonder how many heads and/or hands are stood on when crew are moving in a hurry.

Fair Winds and Following Seas.



HMAS Toowoomba is the second RAN ship to bear the name of Queensland's largest inland city. HMAS Toowoomba (I) was one of 60 Bathurst Class Minesweeping Corvettes built in Australia during the Second World War as part of the Commonwealth Government's wartime shipbuilding program. On the 4th June 1946, Toowoomba, in company with her sister ships HMA Ships Burnie (I) and Ipswich (I), departed Brisbane for Ceylon where they were handed over to the Royal Netherlands Navy.

During her RAN commission she had steamed over 100,000 miles.



## PILOTS

Generally best kept on a short leash.





## Successful command comes to an end **NAVY** **DAILY** in Toowoomba.

After two years at the helm of HMAS Toowoomba, Commander Catherine Hayes has relinquished command at a ceremony alongside at Fleet Base West, in Rockingham.



*Outgoing Commanding Officer of HMAS Toowoomba, Commander Cath Hayes, hands over the 'Ship's Weight' to Officer in Charge of FFH (Fast Frigate Helo) Support Team, Lieutenant Andrew Petrie before her final departure from the ship.*

On the 18th August, Lieutenant Commander Mile Madarac called 'Clear Lower Deck' and over 140 sailors and officers formed up on Toowoomba's quarterdeck to farewell Cath Hayes who will shortly commence her new role as the Capability Support Manager for the Anzac class.

Toowoomba's crew will now transfer to HMAS Ballarat under the command of Commander David Landon during her anti-ship missile defence upgrade period.



## HMAS Tobruk's farewell.

25 June 2015

170 crew dressed in formal winter uniform lined the deck of HMAS Tobruk as she sailed into Garden Island for the final time before being decommissioned.



Under escort of the HMAS Darwin and HMAS Melbourne, the Tobruk took the salute of Navy personnel as she pulled into Garden Island after sailing from Jervis Bay overnight.





Commander Leif Maxfield said it was an emotional moment for the ship's crew as the Tobruk ends a 34-year career in the Royal Australian Navy.

"Every day has been an adventure, and it's been great to go out and provide assistance to quite a lot of people," Commander Maxfield said. It will be sad to see her go.

In the late 1970s, it was decided that the Australian Army needed to be provided with a sealift capability, preferably through the acquisition of a dedicated cargo ship. The chartering of civilian ships to provide this capability when required, as had been done with the merchant vessels Jeparit and Boonaroo during the Vietnam War, was considered and rejected because Australian National Line was unable to provide the necessary level of support. It was decided that a purpose-built ship would be constructed for the role and would be operated by the RAN. While the Army did not require that the ship be capable of beaching, the RAN set this as a requirement, to maximise the ship's flexibility. In 1975, the Navy successfully convinced Australian Military's Force Structure Committee to endorse this requirement over the Army's opposition and the committee





authorised the purchase of a Landing Ship Heavy (LSH) on 19 March 1975.

Tobruk's design was based on Royal Fleet Auxiliary (RFA) Sir Belvidere, the second of the class, which had been modified following the RFA's experience with operating the class' lead ship, RFA Sir Lancelot. The ship was designed as a multi-purpose, roll-on/roll-off heavy lift and transport vessel. The Australian modifications to the design were kept to a minimum to simplify construction, the most significant changes were to improve the ship's ability to operate both large and multiple helicopters, fitting an operations room and adding a derrick with a lift of 70 tonnes. Most of the other changes related to bringing accommodation conditions into line with Australian requirements. Like the other ships of the Round Table class, Tobruk was built to commercial rather than military standards, and is unable to sustain as much damage as warships.



The ship had a standard displacement of 3,353 tons, and a full load displacement of 5,791 tons. She was 127 metres (417 ft) in length, with a beam of 18.3 metres (60 ft) and a draught of 4.9 metres (16 ft). Propulsion machinery consisted of two diesels which provided 9,600 horsepower (7,200 kW) to the ship's two propeller shafts. The ship which was unreliable early in its career was fitted with different engines to those used in the equivalent British ships. Soon after commissioning she suffered a serious engine malfunction and the main engine control had to be redesigned and reconstructed, then after the repairs were completed a Navy cadet was fatally gassed when the ship's sewerage system malfunctioned during trials.



Top speed was 18 knots (33 km/h), with a range of 8,000 nautical miles (15,000 km) at 15 knots (28 km/h). A 400 horsepower (300 kW) bow thruster was also fitted to assist with confined-waters manoeuvring. Armament initially consisted of two 40/60 Bofors guns, supplemented by two 12.7 mm machine guns. During the 1990s, the Bofors were removed and were later replaced by two Mini Typhoon 12.7 mm mounts, which were not permanently installed but fitted as



needed and the number of standard 12.7 mm machine guns was increased to six. It was equipped with a surface search radar and a navigational radar. In 2012, the ship's company was 148, including 13 officers.

Tobruk was capable of embarking between 300 and 520 soldiers (extended duration versus short term), along with up to 3 helicopters, 1,300 tons of cargo or 18 Leopard 1 or M1 Abrams main battle tanks plus 40 M113 armoured personnel carriers or Australian Light Armoured Vehicles. Vehicles and cargo could be embarked via bow or stern ramps with the reinforced tank-deck running the full length of the ship and with inter-deck transfer ramps fitted. The bow ramp was contained behind horizontal-opening bow doors and could be extended and lowered for beach or harbour loading, while at the stern a combined door-ramp could be used conventionally when at suitable facilities, or for ramp-to-ramp loading of landing craft at sea. Additional cargo handling was provided by the 70-tonne heavy lift derrick supplemented by two 8.5-tonne cranes. The ship had an aft helicopter platform capable of handling aircraft up to Sea King size, while the main deck (once cleared of landing craft and cargo) could be used as a secondary flight deck for helicopters up to Chinook size. Both flight decks could be operated simultaneously and both had the capability for landed or at-hover refuelling.

Tobruk was built by Carrington Slipways, Tomago (up the Hunter river from Newcastle) in New South Wales. She was launched in March 1980 and left the dockyard for the first time in December 1980. Her construction had been delayed by over four months by industrial disputes and her final price of \$59 million was 42 percent more than originally estimated. Tobruk was handed over to the Navy in Newcastle in April 1981. She was the first purpose-built amphibious vessel in RAN service and was classified as a Landing Ship Heavy by the RAN.

During her service she has supported humanitarian aid and disaster relief missions from East Timor to the Philippines. The most recent operation was PACIFIC ASSIST 2015 following Tropical Cyclone Pam in Vanuatu earlier in the year.

Living up to her motto of "Faithful and Strong", HMAS Tobruk is retiring with about 2,000,000 kilometres travelled and countless lives helped. She was decommissioned on 31 July 2015 and will be replaced by a Landing Helicopter Dock, the \$1.5 billion warship said to be a game-changer for the Australian Navy, the HMAS Canberra.



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The reason the Air Force, Army, Navy and SAS bicker amongst themselves is that they don't speak the same language.

For instance, take the simple phrase "secure the building".

The Army will post guards around the place.

The Navy will turn out the lights and lock the doors.

The SAS will kill everybody inside and set up a headquarters.

The Air Force will take out a 5 year lease with an option to buy.



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## John Laming.

### Do you believe in gremlins?

#### "Gremlins"..n.

1. a mischievous invisible being, said by airmen in World War II to cause engine trouble and mechanical difficulties.
2. any source of mischief. (orig. uncert.)

The Macquarie Dictionary, 2nd Edition.

I first heard about Gremlins when I was eight years old. That was in 1940 and the Battle of Britain was being fought over Kent. My old Uncle Alf told me about them. He picked up this info from an RAF pilot he met in our village pub - the pilot was recuperating from a crash caused by Gremlins in the fuel system of his Spitfire.



Gremlins were apparently a British manifestation, although as we shall see later, there is evidence that some may have migrated to Australia after the war. Interestingly, they seemed to be peculiar to only British designed aircraft as there were no reports of American gremlins causing problems.

They were first discovered by RAF pilots of the Photographic Reconnaissance Units who flew unarmed Spitfires and Mosquitoes at great heights on photographic missions over enemy territory. Their presence caused great concern, so much so that an alert order was sent to all RAF units. It was in the form of verse which was published in RAF bulletins and often sung to a familiar tune. It went like this:

This is the tale of the Gremlins  
As told by the PRU  
At Benson and Wick and St Eval-  
And believe me, you slobs, it's true.

When you're seven miles up in the heavens,  
(That's a hell of a lonely spot)  
And it's fifty degrees below zero,  
Which isn't exactly hot.



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When you're frozen blue like your Spitfire,  
And you're scared a Mosquito pink.  
When you're thousands of miles from  
nowhere,  
And there's nothing below but the drink.

It's then that you'll see the Gremlins,  
Green and gamboge and gold,  
Male and female and neuter,  
Gremlins both young and old.

It's no good trying to dodge them,  
The lessons you learnt on the Link  
Won't help you evade a Gremlin,  
Though you boost and you dive and you  
jink.

White one's will wiggle your wing tips,  
Male one's will muddle your maps,

Green one's will guzzle your glycol,  
Females will flutter your flaps.

Pink one's will perch on your perspex,  
And dance pirouettes on your prop,  
There's a spherical middle-aged Gremlin,  
Who'll spin on your stick like a top.

They'll freeze up your camera shutters,  
They'll bite through your aileron wires,  
They'll bend and they'll break and they'll  
batter,  
They'll insert toasting forks into your tyres.

And that is the tale of the Gremlins,  
As told by the PRU,  
(P)retty (R)uddy (U)nlikely to many,  
But a fact, none the less, to the few.

As I grew up and became a man in the RAAF, I cast such childish beliefs behind me. That is until one day on the tarmac at Townsville. It was in 1960 and I was serving with No 10 Squadron as a Lincoln pilot and squadron qualified flying instructor (QFI). In airline parlance of 1997, the job would be called by the grand title of Check and Training Captain. The Lincoln was a larger and more powerful version of the wartime British Lancaster bomber. It was equipped with four Rolls Royce Merlin liquid cooled engines and the Lincolns we flew had a stretched nose section housing radio operators who listened out for foreign submarines.



In those days, it was a case of first find your pink submarine. Once you located it by spotting it's periscope, (our radar was useless over five miles) the next move was to drop listening devices called sonobuoys near the submarine and try to gauge his course under the sea. By this time of course, the sub had crashed dived, so we would then let fly with a very expensive acoustic homing torpedo in an attempt to ruin his day. The latest Russian submarines were even reputed to out run our torpedoes.

As with most multi-engined aircraft, the Lincoln had fully feathering propellers to minimize drag from a failed engine and there were four feathering buttons on the instrument panel, one for each engine. During the ground test before take-off, each button would be pressed momentarily to ensure the system was operating. Once the propeller began to slow down indicating correct feathering, the pilot would cancel the test by resetting the button. The propeller would increase

revs again and the test was then repeated for the remaining engines. The whole procedure took about 15 seconds.

One morning I was approached by an engine fitter who claimed that, during an engine run after a periodic inspection, he had pressed the feathering button on one of the four Rolls Royce Merlins to test the serviceability of its feathering system and that the propellers on all engines had immediately feathered.

If this was true, the ramifications were frightening. It meant that if an engine failed in flight and the pilot had to feather the propeller, there was a possibility that a latent electrical fault could cause all four engines to stop - from the push of one button. This gremlin was indeed a dangerous creature of which we had no previous knowledge in Australia.



I thought the engine fitter was having me on - until he bet me 10 quid he could reproduce the fault. We walked to the flight lines where the Lincoln was waiting and I could hear slight clicking noises coming from under the engine cowls as the engines cooled down from their previous test runs. There was the usual smell of hot glycol and heat waves shimmered from the top of the silver engine cowls.

It was over the century on the tarmac and even hotter in the glass covered cockpit. The chocks were in place and we climbed up the ladder leading to the nose escape hatch - the main crew entrance. The huge diesel external power cart belched black smoke as the engine fitter started first the starboard inner engine (called No 3), then the starboard outer, followed by the two engines on the port side. With the four Merlins now idling at 1500 rpm, we received the all clear behind to increase power for the feathering check.

The engine fitter then tested the feathering system of each engine in turn by momentarily pressing its feathering button, noting the rpm drop, then resetting the button. So far there was nothing abnormal. He then told me to select any feather button and press it - but with the proviso that once feathering had started, the button should be reset to within three millimetres of the normal position. I selected the feathering button for the port outboard engine and pushed it in.

The propeller started to feather normally. After the reset, with the propeller now returning to unfeather, I gently depressed the button again just a fraction - as the fitter had said. Nothing happened and I looked at him and said, "what next?". He told me then to feather any one of the other engines. I closed my eyes and pressed a button.

To my astonishment, the propellers on all four engines rapidly went to feather. "That's 10 quid please" said the fitter....We then tried various combinations of button pushing to try and reproduce the fault - and occasionally succeeded.



The feathering buttons were protected from inadvertent bumping by a metal cage surrounding the feathering panel. Each button had an integral fire warning light which could be dimmed at night by a small metal sliding bar situated on the top of the button. Experimenting, we found that if the dimmer bar could be positioned to make contact with the protective cage, it was sometimes possible to feather all four engines with one button. We could not reproduce the fault on any of the other Lincolns. Clearly there was a gremlin at large in the feathering system of the first Lincoln. Or were there others lying dormant, only to wreak havoc on a dark night?



Meanwhile, I was down 10 quid, so I visited the Commanding Officer and suggested that for 20 sterling I could kill four engines with a single blow. He was about to call for those nice young men in clean white suits to come and take me away, until he realised I was serious.

After I had explained what I had seen, he accompanied me to the Lincoln for a demonstration. To our chagrin, neither the engine fitter or myself could reproduce the fault. We did manage, however, a lovely conflagration from the 12 open exhaust stubs of the port inner, due to my over-priming the already hot engine. As the CO was standing in the cockpit only 10 feet from the flames, he got quite jumpy and was about to abandon ship via the nose hatch when the engine finally started and blew out the fire.

The engine fitter was having one final fiddle with the feathering buttons, when a rapid noise decrease from the engines revealed all rpm decreasing rapidly. I hurriedly pocketed the 20 notes and the CO disappeared into his castle to call a hasty conference with his Engineering Officer.

Weeks later, while the investigation into the mysterious featherings was still being carried out,



serious corrosion was discovered in the main wing spars of the RAAF Lincoln fleet. The decision was made to ground them all. Most were eventually sold for scrap metal, while others were destined for fire-crew practice. The investigation was cancelled and as

far as I was concerned that was the end of the story. Or was it?



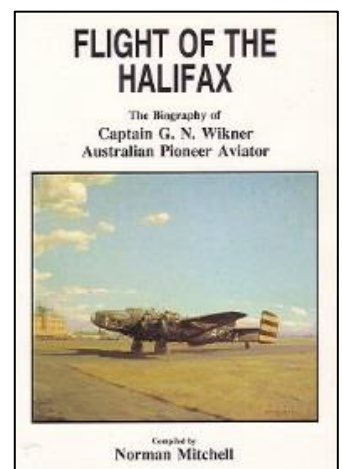
In April 1996, 35 years after the Lincolns were grounded, I was browsing through the Sydney Bulletin while waiting to get a haircut. In it was a story of the sole survivor of a wartime Lancaster crash in 1942. Recounting his experience, he said:

"It was a low level night flight into Germany, but a problem developed over northern France. For some reason one engine stopped. The pilot told the engineer to feather it. He pressed the button to feather this particular motor and all four engines feathered off the one button. It left us with nothing but a full bomb load and plenty of petrol, so we just went down. I bailed out through the front hatch...the plane went over a small hill and blew up".

Later I contacted the survivor, a Mr Chris Jarrett, who lives in a NSW country town. He told me that the magazine story was true. Four days before the fatal flight, the Lancaster had belly landed and had sustained some damage to the bomb bay. After repairs, the Lancaster went on a bombing raid, but several bombs failed to release. Obviously there was an electrical fault and Jarrett thought that the feathering of all four engines on his flight may have been due to a wiring fault caused during the repair work in the bomb bay area.

A few months after talking to the Lancaster survivor, I read a book called "Flight of the Halifax" (the Halifax was another RAF wartime bomber) by a Captain Geoff Wikner who flew 67 types of aircraft as a ferry pilot during the war. On page 144 I was stunned to read this description of a ferry flight that Captain Wikner did in a Lancaster:

"On 3rd of August 1944, I had a chit to deliver Lancaster No.13/455/c (a number I have never forgotten) from Strathaven to Scampton, with first engineer Gillespie. His duties entailed instrument checks, changing petrol tanks and ensuring the airscrews would feather and unfeather when required to do so. On occasions the switch controlling the feathering of each engine would stick, allowing the particular engine to overrun its maximum revs. To correct the problem the engineer would have to place two fingers under the feathering button and pull it out at the right revolutions. He also had to be ready to feather a propeller on any engine that cut on take-off.



Everything went smoothly during the early part of the flight. With a clear sky and good visibility, I thought it was a good time to test the engineer on the feathering routine.

We were cruising at 3000 feet and nearing our destination. No.4 starboard airscrew was feathered according to procedure. No.1 and 2 motor revs were then increased to 2600 rpm and plus seven pounds boost. No.3 airscrew was feathered correctly with the aircraft trimmed with maximum bias to port. We were now flying on two engines.

In one minute I gave Gillespie instructions to unfeather No.3 airscrew and watched him carefully. He turned on the fuel master cocks and placed his thumb on the No.3 button and





pressed. I was watching the revolution counter when I felt a sudden swing to port. I looked out to see both airscrews feather and stop. No.3 unfeathered but the motor didn't fire. Gillespie then unfeathered No.4, the motor ran for a short period and finally cut out with a loud explosion as though short of fuel. While this was happening No.3 feathered itself with the result there were no engines functioning and I had control of an overgrown glider of about 30 tons. The wind was whistling around the aircraft and then the rudders were inefficient.

I unfeathered No.1 and 2 airscrews then instructed Gillespie to put on the fuel booster pumps and change tanks. While this was happening I think Gillespie was endeavouring to get No.3 unfeathered again and then No.1 feathered itself. During all the motor juggling I had difficulty in maintaining a straight course, having to spin the rudder bias to one side or the other to meet the altering directions. I finally got No.1 unfeathered and running - this gave me two motors operating on the port side and two dead windmilling motors on the starboard.

RAF Skellingthorpe aerodrome was within approach distance. I decided to leave the airscrews as they were fearing they might all feather again and went in for a landing. I approached a little high and fast and swish tailed the aircraft in an attempt to reduce speed and finally made a three point landing without over shooting. When I finished my landing run, all four engines were ticking over. I taxied to the Watch office where I tested each engine with perfect results. Later the ground staff carried out the same feathering procedure as we had in the air but found no defect. The aircraft was placed under armed guard and a test pilot from A.V.Roe, the manufacturer, was sent to finish the delivery. On hearing that good piece of news I said that I didn't care if JC himself wants to fly the plane, but I'm not.



I never heard what caused the trouble so I guessed it was hushed up. After my episode, I learnt that four Lancasters had crashed at different times and all the crews killed. Investigators found the airscrews in the feathered position."

I returned the book to the library from which I had borrowed it and while there picked up a copy of "Flight International". There was an article about the only flyable Lancaster in the world operated by the RAF Battle of Britain Memorial Flight at Coningsby in Lincolnshire. I began to wonder about the gremlins who once lived in the feathering systems of the Avro Lincolns and Avro Lancasters. I knew both types came from the same manufacturer in England, with the Lincolns I once flew built under licence in Melbourne. Surely these gremlins were long since dead and buried - after all, it was more than half a century since these deadly creatures first surfaced in England and 35 years since my own encounter with one at Townsville.



I decided to write to the Commanding Officer of the Battle of Britain Flight about my experience with the feathering of all four engines in the Lincoln back in 1960. I felt I should warn him that, to my knowledge, the mystery was never solved. As his machine was the last surviving Lancaster, perhaps he should look closely behind the dashboard. I enclosed the story of the



sole survivor of the wartime Lancaster crash, plus the extract from Captain Wikner's book on his experience in Lancaster No. 13/455/c. I decided not to mention my suspicions about gremlins. He wouldn't believe me anyway, because he was too young to know about such things. Anyway, I feared he too might call for the nice young men in the clean white coats to take me away.

On the 7th August 1996, I received the following letter addressed to Squadron Leader John Laming AFC RAAF (Retd):-

*"Dear Squadron Leader,*

*Thank you for your letter of 24 July about feathering of the Lancaster engines. Sqn Ldr Paul Day, OC BBMF has passed the letter to me for response. I thought I would let you know that we had received your letter because it will take some time to get together comments from my engine and electrical trade managers as well as our aircrew, some of whom are from other units.*

*In the meantime I am sending you a copy of our 1996 brochure. Thank you for your interest and I will write again in a week or so".*

*Yours faithfully..L.Sutton (Warrant Officer)."*

Then in 1999 I ran into a QANTAS engineer who was visiting Melbourne to inspect a light aircraft at Essendon Airport where I worked as a flying instructor. To my surprise he recognised my name from forty years earlier when he had been a RAAF engine fitter on Lincolns at Townsville. It turned out he was the airman who had discovered the mysterious feathering faults described in this story. I asked him if would consider writing to the RAF Battle of Britain Flight to explain the history of the feathered propellers. This is what he wrote:

*"To: Warrant Officer L. Sutton – Engineer Officer – Royal Air Force – Coningsby, Lincolnshire.*

*Dear Sir,*





*I recently had a conversation with a Mr John Laming of Mercury Air Services in Tullamarine, Victoria, Australia. My association with John is that he was the QFI of No. 10 Squadron Royal Australian Air Force based at Townsville Airbase in late 50's to early 60's. I was based at Townsville as a Leading Aircraftman Engine Fitter during that period.*

*While reminiscing with John about our times and mutual acquaintances during that time, John mentioned the problems with the uncommanded multiple propeller feathering on the 10 Squadron Lincoln aircraft. I was familiar with the problem, but after talking and reading the articles that John had written about Lancasters and Lincolns I realised the problem with uncommanded feathering was related to an incident preceding John's description of events at Townsville.*



*I had been tasked by Sgt Mal Winson along with others to change the No 2 propeller on the Lincoln undergoing a "C" check servicing. The propeller is required to be feathered prior to commencing the removal procedure. I pressed the No 2 feathering button and No 1 and No 2 propellers commenced to feather at the same time. At no time had I touched the No 1 feathering button. I cut the electrical power to stop the feathering actions.*

*Examination of the feathering buttons showed that a Day/Night Slide was in the Night position and trapped under the feathering button's protective cage. My recollection is that investigations by the electricians indicated that electrical power on No 2 was linked to the circuitry related to No 1 when the feathering button was in this trapped position. The subsequent fix to prevent similar uncommanded feathering action was to place spacers under the feathering button protective cage, so as to allow the buttons to fully extend when pulled out regardless of the position of the Day/Night slide.*

*I do not know if the modification was formally approved as a short time later the Lincolns were grounded and taken out of service and scrapped. I hope this information will be of*

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*assistance in going some way to solve the problem noted in John's description in his articles.*

*Yours sincerely,  
John R. Griffin.  
Senior Quality Surveyor,  
QANTAS Airways.*

I don't know what happened after that!!



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## Sick Parade.

If you know someone who is a bit crook,  
let us know so we can give them a shout out..



## Good News.

We don't have anyone on sick parade this edition – good news!!



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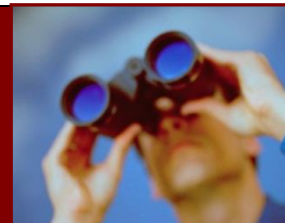


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## Where are they now?



We received the following "I have had an enquiry from a gentleman Terry Kruse who is trying to track down an old school friend. His name is Peter Cooper who joined the RAAF in approx 1964 and served in SVN. He was also at the Radio Section at RAAF Amberley, at some stage.

If you can assist please contact Terry Kruse on 07 5429 0318."

Gavin Rogers  
Secretary  
Townsville Sub-Branch  
Vietnam Veterans Association  
07 47230569 Mon-Fri 0800-1130  
0417774789  
[secretary@vvaatvl.org.au](mailto:secretary@vvaatvl.org.au)



We received the following from Rodney Brittain, Secretary DFWA.

"Good afternoon all, attached is a list of tasks for which we urgently need volunteers.

If you believe that you could assist in any one of these positions, do not hesitate to contact one of the persons listed in the attachment.

It should be noted that while we have some 690 members in the QLD branch we seldom see any more than 15 members at an AGM and even less at the regular morning teas or business review meetings held throughout the year. For the organisation to survive in the long term we need more members to become involved in day to day operations, especially those members located in the Brisbane Metro area and immediate surrounds. We continue to have a steady stream of requests for assistance from past and present ADF members but to adequately continue to meet the objectives of the DFWA we do need more membership involvement.

Regards,

Rodney A Brittain  
Secretary  
DFWA QLD



Mobile: 0407 020 267

Email: [rodbrittain237@gmail.com](mailto:rodbrittain237@gmail.com)

## **DFWA Committee Positions.**

Commitment: DFWA Qld Branch has a meeting (either Business review or Committee) the last Friday of each month and those helping would be asked to attend that meeting.

DFWA members attend RUSI hall at Victoria Barracks Brisbane (VBB) every Friday morning attendance is voluntary but there is a good morning tea commencing at 0930hrs. The office is open Tuesday and Wednesday between 0900 and (normally) 1400hrs. The office is manned by volunteers. Computers and printing will be available in the office but get in contact with the secretary to ensure the office will be open. DFWA has a server where approved people can log on and it is the central repository of DFWA QLD information. Access to the DFWA server will be provided if required.

For those located some distance away remote working may be possible as we have our server but that will have to be discussed.



## **Assistant Treasurer.**

Work with the treasurer to understand DFWA accounting on MYOB. Carry out treasurer related duties in the absence of the treasurer. Understand how to access and use the membership database (read only capability). Liaise with the Membership Secretary in relation to any necessary updates to the membership data base. Understand how to print address labels for Camaraderie and envelopes is necessary.

## **Membership Development Officer.**

Research and develop proposals for Committee approval to increase DFWA membership from the current serving ADF members and ex-Service community. Research and develop proposals, for Committee approval, to maintain existing Branch membership. Research and develop proposals for Committee approval to increase broader community awareness of the DFWA brand and understanding of DFWA's mission and roles that could lead to increased membership or financial support. Actively take action to improve the knowledge of DFWA QLD with the Defence Community in our area (QLD) including regular updating of hand-out packs at transition seminars. Develop a Public Relations plan for the general community and the e-community.

## **Assistant Hotline Editor.**

Work with the Hotline Editor to develop hotline. Seek articles and photographs between issues to be printed. Assist in providing DFWA Qld Branch information/articles for the national magazine Camaraderie. Work with committee to find appropriate and interesting articles.

## **Pensions Welfare and Advocacy.**

Training will be provided free through the DVA Training Improvement Program (TIP). Some of it is attendance some can be done on line. Individuals can nominate for welfare and basic pensions and will need to be sponsored by DFWA, or another ESO. Advanced advocacy is by invitation. DFWA will arrange for initial mentoring. For those outside SEQ it may be another ESO.

### **Welfare.**

- Initial visit to see if we can help.
- Visiting members in hospital, their homes and/or aged care facilities.
- Assist them to access services either DVA or civilian.
- Provide general assistance.

### **Pensions.**

- Welfare Activities
- Assist in raising and processing claims on DVA
- Assist in the review process through to the VRB and maybe to the Administrative Appeals Tribunal.

### **Advocacy.**

- All pensions actions
- Assist in the review process
- Represent at the AAT if required.

RUSI HALL will be available for interviews and DFWA computer resources will be available at RUSI Hall.

For more information please contact:

Assistant treasurer position:	Wal Buldo 0438 327 210
Membership Development:	Rod Brittain 0407 020 267
Assistant Hotline Editor:	Ray Gibson 0421 087 159
Pensions Welfare Advocacy:	John Lowis 0439 192 574.
General:	Rob Shortridge: 0412 503 203





## **Brent Crowhurst**

Jeff Latter is looking for Brent Crowhurst. Brent was a CO of 3 Sqn and marched with us on Anzac Day but I have lost his contact. If anyone can help it would be very appreciated.

If you can help, let us know and we'll pass on your info to Jeff - tb.



## Your say!



**IT'S MORE THAN A QUIXOTIC CALAMITY.**



**From Victor Stallon.**

The European Renewable Energy Foundation, a Green body supportive of all forms of renewable energy, has carried out research at Edinburgh University involving a look at years of wind farm performance data from the UK and Denmark. Their conclusion is this:





“Put bluntly, wind turbines onshore and offshore still cost too much and wear out far too quickly to offer the developing world a realistic alternative to coal.” And these guys are Green renewable energy nuts!

The good news for Australia is that this highly subsidised and ineffective form of Green inspired visual pollution will be non-existent within ten years. The report found that by 10 years of age, the output of an average wind turbine will have declined by a third and by 12 years of age it will be uneconomic to recondition the moving parts.

The bad news for Australia, if they intend to persist with this windmill madness, is that they will all reach their maximum life span at the same time!

Thousands and thousands of these hideous, noisy monstrosities will all need to be replaced at once, and guess what? Investors will have headed for the hills because all those delicious subsidies will have disappeared like Christine Milne and it will cost governments (again you and me) a motza to dismantle and dump the things in the ocean as fish reefs.



The countryside on the eastern shore of Lake George, on the Goulburn to Canberra Hwy, blighted with these hideous machines.

They will become worthless bits of metal and plastic no other industry can possibly use. The government of the day will no doubt keep one turbine in a museum somewhere as an artefact so schoolchildren can be shown just how stupid the Greens really are. South Australia, which has the highest cost of electricity in the nation and the most wind turbines per capita, has saved 4% of their rated capacity in fossil fuels at a cost of \$1,484 per ton. That's roughly \$1,474 per ton more expensive than Europe's current carbon credit price.

The cost of these commercial white elephants, that must eventually be destroyed, is between a highly subsidised \$350,000 and \$1.3 million each...and the temperature of the globe hasn't shifted one thousandth of a degree. Stand underneath a wind turbine that is typically 120 metres tall and try to imagine how our beautiful countryside once looked. But that's a visual and



noise pollution that will never disadvantage the Greens, oh no, they'll be happily sipping their lattes in leafy green inner suburbs.

Only two forms of energy can replace the Greens' hated coal, and neither is wind or solar. The only freely available clean forms of energy are hydro and nuclear but the Greens refuse to allow dams to be built while frogs need protecting and uranium evokes Green paranoia.

Funny eh?

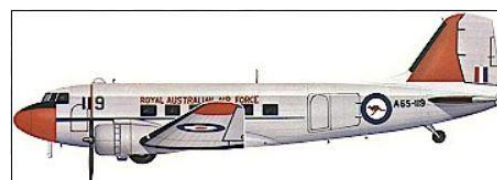
Religion is for people who are afraid of going to hell.

## Ubon.

Rod Jenkins maintains a web site with a bunch of photos from Ubon. You can see them [HERE](#)

## A65-61

I have had a request from an author, who is writing a book about the crash of a 38 Squadron Dakota - A65-61/VH-CUT - in New Guinea, on 18 September, 1945. She is seeking to contact any one with connections with or knowledge of the aircraft or the incident, particularly any ex-38 SQN personnel, of the time. If you have any information on the incident, please contact Marilyn Campbell on [marilyncampbell.author@gmail.com](mailto:marilyncampbell.author@gmail.com), or by telephone on 0400 084 578. (See [HERE](#))



### Definitions:

**CIGARETTE:** A pinch of tobacco rolled in paper with fire at one end and a fool at the other!

## Ballarat Mosquito 1955.

Ken Hunt is asking if anyone can advise him about the complete (or almost) Mosquito hangered at Ballarat in 1955? Also there was a very basic "Link type" trainer. I think all





anybody learnt was if they were afraid of the dark!. If you can help Ken, you can contact him here [kdhunt@optusnet.com.au](mailto:kdhunt@optusnet.com.au)

## Bill “Nobby” Clark.

Nobby Clark sent us this pic.



He says: “I saw the story of the [Djinnang Reunion](#) that included Graham Saunders and Trevor Horne, both of whom I have not seen since Vietnam 1970. I have attached an old photograph from those days (10 Operational Support Unit – 1970/71) which, if you wouldn't mind publishing, might bring back a few memories.

Graham is on the left, Trevor third from the right and I am second on the right. The hair colour has changed slightly since then”.



**LECTURE:** An art of transmitting Information from the notes of the lecturer to the notes of students without passing through the minds of either.

## ANZAC Day, 1969.

John Laming wrote, he says: “These photos were sent to me by a lady called Mrs Gail Mirams whose husband was an RAAF ground staff airman at the end of the war and served in PNG on Beaufighters, Kittyhawks and later on, Mustangs (BCOF Japan?)

He was marching on Anzac Day 1969 in Melbourne. These photos of a Wing Commander who was also marching and holding a banner depicting 81 Fighter Wing, 76,77, 82 Squadrons S.W.P.A to Japan. His appearance is vaguely familiar to me but I am unable to recall his name.

Gail asked if I could identify him as she is putting together a picture frame with photos from her deceased husband's belongings which include photos taken during an Anzac Parade he took part in in 1969”.



(If you can help, please let us know and we'll pass on the info to John. – tb)

**CONFERENCE:** The confusion of one person multiplied by the number present.

## DC7

Adrian Heinrich, who is an old ex-Radtech and a self-proclaimed aviation buff who loves aircraft with round engines, sent us this link of getting to know and fly the mighty DC7. The DC7 was a transport aircraft built by the Douglas Aircraft Company from 1953 to 1958 and was the last major piston engine-powered transport aircraft made by Douglas. It was developed shortly after the earliest jet airliner, the de Havilland Comet, entered service and only a few years before the jet-powered Douglas DC-8 first flew.



In 1945, American Airlines requested an aircraft that could fly the USA coast-to-coast nonstop in about eight hours as back then US Civil Air Regulations limited domestic flight crews to 8 hours flight time in any 24-hour period. American Airlines ordered 25 DC-7s at a price of \$40 million, thus covering Douglas' development costs. The DC-7 wing was based on the DC-4 wing with the same span and the fuselage was 40 inches longer (behind the wing) than the DC-6B. The engine was the eighteen-cylinder Wright R-3350 Turbo-Compound. The prototype first flew in May 1953 and American received their first DC-7 in November that year, inaugurating the first nonstop east-coast-to-west-coast service in the country (unrealistically scheduled just under the eight-hour limit for one crew) and forcing rival TWA to offer a similar service with its Super Constellations. Both aircraft frequently experienced inflight engine failures, causing many flights to be diverted. Some blamed this on the need for high power settings to meet the schedules, causing overheating and failure of the engines' power recovery turbines which recovered power from the exhaust stream and delivered it to the crankshaft; boosting the R-3350's power by 600 HP.

The DC-7 was followed by the DC-7B with a bit more power and, on some DC-7Bs (Pan Am and South African Airways), fuel tanks in the tops of the engine nacelles, each carrying 220 US gallons. South African Airways used theirs to fly Johannesburg to London with one stop. Pan Am's DC-7Bs started flying transatlantic in summer 1955, scheduled 1 hr 45 min faster than the Super Stratocruiser from New York to London or Paris.



Douglas then built the DC-7C, which had an additional 40 inch plug inserted in front of the wing, making it 112 ft 3 inches long. This aircraft had additional fuel tanks fitted allowing it to make the New York to Europe then Europe to New York, against the prevailing winds, non-stop each way.

In 1958 Boeing released the 707 which signed the death-warrant for round engine aircraft. Douglas began converting its DC-7 aircraft into freighters by fitting large forward and rear freight doors and removing some cabin windows.

Unfortunately, the DC-7 was not as reliable as the DC-6, due to the different engines. The DC-6 used Pratt and Whitney Double Wasp engines which Douglas considered were not powerful enough for the DC-7 so they fitted Wright Aeronautical Duplex Cyclones which had reliability issues.

Douglas built 338 DC-7s. You can see the video [HERE](#)

**COMPROMISE:** The art of dividing a cake in such a way that everybody believes he got the biggest piece.

## Help wanted.

Jules Perrin wrote: "In your very diverse readership there are thousands of years of experience in life experience, projects, computers, materials and other matters technical. As the age of your readership increases, we all strike living issues. I don't mean things like programming the microwave or using a computer but issues such as mobility, using knife and fork or something just as simple.

Your readership may be able to address and/or resolve issues to provide a better quality of living. There are organisations such as Technical Aid for the Disabled, but not all life's issues are related to someone with a direct disability.

In essence, technology to aid a better quality of life.

Not sure if I have explained myself well.

I am trying to work on a simpler self-feeding device for a disabled child (not my child). Your readership may have ideas in this field. I am sure there are many other examples the readers are confronted with every day. Just a thought.

If you can help, get in touch with Jules on 0457 585 974

## Canberra silhouette.

Graham Henry wrote, 'I had a call from Geoff Bucknell, former FSGT Instrument Fitter who was with 2 SQN at Amberley after the Sqn returned from Vietnam. Geoff is seeking information about the origins of a 4 foot long side-on silhouette image of a Canberra made of masonite, that was brought back to Qld from Vietnam.

Geoff agreed to have the picture/image mounted in 2 SQN Instrument Section at Amberley, as it was obviously important to the boys who had returned from that conflict. He does not have a photo of the item.

Unfortunately, it was not appreciated by his superior officer (wanker), who directed that it be removed. Geoff was reluctant to bin it and secured its custody at home hoping to preserve it for posterity.



# THE RAM

THE MAGAZINE BY & FOR SERVING  
& EX-RAAF PEOPLE & OTHERS



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Geoff has since donated it to the Vietnam Vets National Museum at Phillip Island to add to the history of the conflict and he hopes that we can locate the history of this item, who made it, where was it mounted within 2 SQN in Vietnam, who was involved in getting it back to Aust and any other associated details.



The Museum will welcome this information to add to the memorabilia held there and adding to the pride the Vietnam Vets feel when reliving their experiences with the Squadron when visiting the National Museum.

If you are aware of this bit of history, please get back to me so that I can pass it on to Geoff”.

Graham Henry

2 Squadron (RAAF) Assoc Inc  
Email: [geehen@optusnet.com.au](mailto:geehen@optusnet.com.au)  
Ph: 03 9570 2186

CONFERENCE ROOM: A place where everybody talks, nobody listens and everybody disagrees later on.

## News and Reunions!



### 12 Sqn Chinook.

John Flannery, an ex 12 SQN (Chinooks) bloke and a few mates are reinvigorating their ex 12SQN members database and have asked if we could put a note in our next magazine for any interested ex 12Sqn members to contact himself ([john.flannery@casa.gov.au](mailto:john.flannery@casa.gov.au)) or Rob Cooper ([Robert.Cooper@Raytheon.com.au](mailto:Robert.Cooper@Raytheon.com.au)) or Scott Betteridge ([SBetteridge@burrell.com.au](mailto:SBetteridge@burrell.com.au)).



### RADIO Reunion

John Broughton and Mal Sayers are planning a reunion for Ex-RAAF Radtech bods (and bodettes) which they hope to hold in Brisbane on the 22<sup>nd</sup> and 23<sup>rd</sup> April 2016. Anzac Day next year falls on a Monday so the idea is to hold the reunion on the Friday (22<sup>nd</sup>) (a meet and greet) with a dinner on the Saturday night (23<sup>rd</sup>) then those with war service can march with their unit on the Monday. Depending on the acceptability of the proposal, other events will be planned for Saturday afternoon and Sunday morning.



If you are interested in attending a reunion next year, please send an email to John ([jbroughton46@gmail.com](mailto:jbroughton46@gmail.com)) or to Mal ([karnak661@gmail.com](mailto:karnak661@gmail.com)) and let them know. If there is enough interest they will get it done.

### Vietnam Tour.

Rod Richardson wrote, "[Trade Travel](#) are major group travel specialists and are delighted to attach their exclusive Vietnam Highlights Tour including a commemorative visit to the "Battle of Long Tan" Memorial Site in its 50th Anniversary Year. The tour, which will be held over the period 16 Days 8-23rd April 2016, is essentially an exclusive highlights/sightseeing tour through



Vietnam (from the North through to the South) including all the Vietnam Highlights with one full day dedicated to visiting the Long Tan area and memorial site during its milestone 50 year anniversary year.

The special tour will be hosted ex-Brisbane by Graham Smith from the Sixth Battalion Association and a Veteran of Long Tan itself and includes return flight with Singapore Airline (ex-East Coast Capitals), 4 star accommodation throughout, most meals, all sightseeing and entries, English speaking guide, local gratuities and much more. The tour represents excellent value at \$3,997.00 per person twin share.



If I could ask you to please let your membership know about this tour and generally promote it amongst Veterans, the various Association, RSL Sub-branch members, their family and friends it would be much appreciated. If you need any assistance, flyers and/or hardcopies of the itinerary itself please don't hesitate to contact me direct.

April 2016 will be here before we know it so if there is genuine interest among your members I'd encourage them to register their interest early to avoid possible disappointment in the event that it books out.

If you have any queries or you require any additional information please don't hesitate to contact me direct.

Rod Richardson <[rod@tradetravel.com](mailto:rod@tradetravel.com)>

## Multicultural Group.

Vic Stallan wrote: "When I retired from paid work in 1993 (aged 60 ) I became firstly a voluntary literacy tutor to adult Aussies then an ESL tutor to migrants at the Alex. Hills TAFE in the Redlands (Brisbane). I continued in this voluntary occupation until 2000.

Since then I have been involved with a Multicultural Group which meets every Thursday at the TAFE or at other venues organized by the woman from Iran, shown in the photo.

Last Thursday we enjoyed a lunch of Malaysian and Burmese foods.



*Some of the food set out at our multi-cultural lunch at the Malaysian woman's home..*

I often help them with pronunciation, explanations and other relevant aids to improving their English. Lately I have been copying their VHS home movies (some dating back to 1989) to DVDs.

Mixing with these people who, with one exception, are much younger than I, keeps me feeling young”.



**L-R:** Helena, Portugese; Minnie, Austrian; Elizabeth, Scot; Pashtoon, Afghan; Shahin, Iranian; Helen, Aussie; Victor, Pom-Aussie; Zuzana, Czech; Rina, Malaysian; Moe Moe, Burmese.

The photo was taken by an Egyptian man, John.



## Suggy's men; the first RAAF mob in Vietnam.

There's a couple of ex RTFV pilots who are writing a book about the first arrivals at Vungas and they are looking for people who were there under Sqn Ldr Chris Sugden. If you were there in the early days and you haven't been in touch with these blokes, please get in touch with Don Pollock [HERE](#).



Does anyone recall the unit song which was sung to the tune of the "Pub Without Beer." Don would like details of how, when and under what circumstances it was composed.

Click [HERE](#) to get the words to the RTFV Song.

## 35 Sqn Freedom of the City.

John "Sambo" Sambrooks, the People's Champion and also the Secretary of the RTFV/35 Sqn Association advises that a Freedom of the City march/parade will be held in honour of 35 Sqn in Cooktown (Qld) sometime between April and August next year – and we're invited. It is still in

the planning stage and as soon as a firm date is agreed upon he will let everyone know. The parade is being organised by a CPL Renae Halley from 35 Sqn and she is trying to gather some relevant information as to what's previously been conducted by 35 SQN.



She says: "At this early stage, if you're able to assist in any way on the following points I'd be very appreciative:

- airport / air traffic control details.
- previously used accommodation options for up to 50 personnel.
- previous vehicle support companies / options.
- previous local watering hole (pub) details.
- admin instruction/s or copies of ANY documentation from previous FOC march's.
- anything else of relevance.
- I've touched base with the Cook Shire Mayor, Mr. Peter Scott and his initial response to have 35SQN infiltrate his town is positive.

I am scheduling a meeting for next week with a small committee I have set up to really get the ball rolling. I anticipate more questions will follow and the plan will further evolve".

The RAAF's plan so far is:

- 35SQN Executives and parade members arrive on a FRIDAY.
- Conduct FOC march the following SATURDAY.
- conduct a post parade fuction on that SATURDAY.
- organise a 'social' event with local residents the following SUNDAY (ie: cricket match and BBQ lunch).
- all 35SQN members depart late SUNDAY or MONDAY.

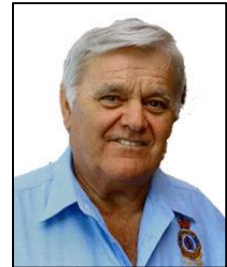


If you can help, let Sambo know and he'll pass on the info. Any help/suggestions you can provide would be greatly appreciated.

The Freedom of the City was given to the 35 Squadron in 1998 as a result of the close ties between the Squadron and the Cooktown community over several years.

Sally Eales, the Tourism and Events Officer with the Cook Shire Council has offered the local accommodation options available in Cooktown and you can see the list [HERE](#)

Sambo says: "From the photos we've seen it looks like a wonderful place for a few days holiday, perhaps we could arrange a "convey" and all those interested in going could meet in Brisbane and we could all drive up together. It's 2,000 klm from Brisbane so that's a few nights on the road each way but if there is enough interest I can put on the planning hat and organise some events/tours, cheap accommodation etc on the way.



The road from Brisbane to Cairns is sealed all the way and very easy. There are two ways to get from Cairns to Cooktown, the inland route is fully sealed, is 330 klms and takes about 4 hours. The coastal route is only 230 klms in length but is for 4wd vehicles only. I would suggest we could liaise with the Cook Shire Council tourist department and organise some group "sight-seeing activities" on the Monday and possibly the Tuesday after the parade before heading south again, after all, it is a damn long drive if we're only going to stay 2 nights".

If you're interested, let me know, you can contact me [HERE](#) or by phone 0408 872 736"

## Planning Ahead.

Many members of the veteran community are reaching a stage in life in which they may be considering the impact that bereavement could have on their loved ones. In particular, they may be thinking about what they can do now to assist their loved ones manage such an event in the future.

Planning Ahead has been developed by the DVA and is designed to provide information to help veterans and their families prepare for bereavement. The personal information and checklists will help ensure that important information is available to families when it is needed.



Many ex-service organisations and a number of other key organisations have assisted with this booklet, including the Public Trustee's Office, the Law Society of New South Wales, Tobin Brothers Funeral Directors and the Australian Pensioners and Superannuants Federation. The cooperation and contribution of these organisations has been invaluable.

The services and organisations listed in the booklet, including the Department of Veterans' Affairs, are always ready to provide whatever assistance you may require.

You occupy a special place within the Australian community. The Australian Government and the Department of Veterans' Affairs are committed to listening to your needs and responding in a way that recognizes your importance in Australia's past, present and future.

You can download the booklet from [HERE](#).

There is also a checklist that can be used to record the contact details of important people, businesses and organisations that may need to be notified in case of your death. You can get that [HERE](#). There is also a Personal Information Sheet ([HERE](#)) which will help your family with personal information in the difficult time following bereavement and if you choose to complete and retain [THIS FORM](#) (your medical details) it might be useful too.

## **Caboolture Aviation Museum.**

Russell Walker needs to have an all points bulletin (a DD to all stations??) asking our mates whether they have any old memorabilia that they would be willing to donate or loan to the museum. They currently have a reasonable display but can always use more. As people pass away (and we are in that age group now) their keepsakes are often thrown out. We can guarantee that any such keepsakes would be valued and preserved for posterity. Photos are also welcome as is any old communications kit or uniform items.

We're having a look through the museum in the near future and we'll report on it next issue.



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