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## New Menu

We've made some changes to the menu system, now you can find a topic, click it and it will open the info for which you're looking. Hopefully, this will make it a lot easier to read. After you've finished one topic and you want to return here, just click the "close tab" button (X) at the top of your page.

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## Course Photos.

Back in 2013 we started to catalogue and display [Course photos](#) on our web site. With the help and guidance of the late Ted Ilton, we started with the RAAF Academy and after we'd finished that, because of requests from some of the ladies, we started on the WRAAF recruit course photos. We had help with the WRAAF photos from some of the girls and from a most helpful lady at the museum at Pt Cook and we were able to get copies of most of the 247 WRAAF courses the RAAF ran (the RAAF dropped the W bit after 247 and the girls joined the RAAF).



We applied officially for access to the RAAF's depository of photos which are held in a climate controlled room at Pt Cook (we'd seen them when we were working at Pt Cook some years ago) as we wanted to complete the WRAAF section and start on other groups, such as Pilots and Comms people.

That was when the fun started.

Although given approval initially, all of a sudden excuses began to pop up as to why we couldn't get access. We have been able to build up a partly completed catalogue of photos, mainly because people had sent in copies of photos they have held over the years but try as we might, we couldn't get access to the RAAF's collection.

This went on for years and although to date there has been nearly 245,000 people access the site, we have not received one complaint, in fact we get heaps of "thank you" emails because as far as we know, if someone wants a photo of one of the courses they were on years ago to show to their grand kids, (or whatever), there is nowhere else to go.

In desperation, we asked Ted McEvoy, who had corresponded previously with his MP, the Hon Ben Moreton, to approach him again and see if there was any way a door could be opened and we could somehow get access to the photos. Ted duly did that, he fired off a letter to Ben Moreton, outlining the years of frustration and stone-walling I'd encountered and asked if anything could be done.



Seems Ben Moreton was surprised at the lack of support I'd received from the RAAF as he fired off a letter to the Hon Darren Chester, the Minister for Veterans' Affairs, asking



him to look into it. It seems Darren Chester was also a bit surprised as he promptly replied to Ben Moreton advising that the photos would be made available.



Shortly after that, Ted received a call from WngCdr Grant Taylor, the CO of 2 FTS at Pearce, advising Ted that photos of all RAAF Pilot Courses were held at Pearce and if Ted wanted to, he could come out to Pearce and get copies.

Wonderful news - but a shame we had to resort to those measures to get something of benefit to many.

Ted drove out to the Base on Thursday 25 June and we must say, he was warmly welcomed by Grant Taylor who was very helpful and assisted Ted in every way possible. Once we get the JPGs from Ted, along with the names and course numbers etc, we'll collate them and update the site and it will be available to everyone - at no cost. The Radschool Association does this as a free service to its members.

We suggest you have a look at the site towards the end of July.

Now that we've been given access to the Pilot's Courses, and the sky didn't fall in, we'd like to continue, next group we'd like to attack is the Navigators, we believe those photos are held at East Sale, then the big one - the Radschool Photos.

But one step at a time. A bit thank you to Ben Moreton for getting the ball rolling, thank you also to Darren Chester for opening the door and thank you also to Grant Taylor for making it so easy for Ted.

## Fund raiser.

On the 7th March, we had a fund-raiser sausage sizzle at the Stafford (north of Brisbane) Bunnings store and what an experience that was. Bunnings have to be commended for this, they provide the marquees, the barbecue, gas, cooling fans, rubbish bins, the site, blackboard and even the chalk to write your message on the board, all at no cost. Their only requirement is participants must be a non-profit charitable organisation - which we are.

We were promised another day (7th June) but the Corona Virus fixed that and Bunnings' barbies all across the country were put on hold UFN. We believe we're still on the list to hold another barby sometime this year if/when things are relaxed, and we're still looking for "volunteers" to help out. If you would like to spend a few hours sometime in the future, we'd love to have you. Male or female, doesn't matter, we're an equal opportunity organisation and we've found the ladies are better at organising these sort of things anyway - so come on girls, hands up!!





If you can spare the time, at the moment we don't know when, please fill in the form below and let us know. As soon as we get the nod from Bunnings we'll let you know.

First name:

Surname:

Phone number:

Email address:

Hours available:

Comments

## TPI/EDA travel on public transport.

Remember the big ballyhoo last year on the introduction of the Australian Defence Veterans' Covenant. Remember this?

*We, the people of Australia, respect and give thanks to all who have served in our defence force and their families. We acknowledge the unique nature of military service and the sacrifice demanded of all who commit to defend our nation. We undertake to preserve the memory and deeds of all who have served and promise to welcome, embrace, and support all military veterans as respected and valued members of our community.*

There were pins and new cards and certificates handed out and promises made and the world was going to be a great big wonderful place.

What happened?

As Australia was going to respect and give thanks to and make things easier for its vets, in February this year I wrote to the Minister for Veterans' Affairs, the Hon Darren Chester, suggesting that as all States provide a free travel pass for use on public transport to TPI/EDA vets, why not make it a Federal pass, make it easier on the troops and instead of each State having to provide a dedicated pass, could we not instead use the new Veterans Gold Card, about which all the fuss was made and which is distinctly embossed with TPI. (It is not yet embossed with EDA but could be).



At the moment States issue the pass to people who live in that State for use on transport in that State but if you travel to another State, all you have to do is write to that State's Transport Department, showing confirmation of your TPI/EDA classification and you'll get issued with a temporary pass for the time you spend in that State - I've done it. So why not a Federal Pass?



The Minister took the time and promptly wrote back saying it was a State thing and the Commonwealth couldn't get involved.

You can see my letter [HERE](#) and the Minister's reply [HERE](#).

Well, as it was a State thing, I wrote to each of the State Transport Ministers, asking if they would accept the embossed Gold Card as a transport pass. You can see that letter [HERE](#).

You can see the replies from each State Transport Minister [HERE](#).

We thought it was a good idea and if the NT and Tasmania can do it, surely it's not such a big thing. Perhaps when the next election is due and the Pollies want to be seen as though they do care for Australia's vets, we should bring it up again.

But don't hold your breath!

## 100th Anniversary of the RAAF celebration.

We had to cancel our plans for the big get together in Melbourne next year but that doesn't mean we're cancelling all together. We've decided to hold our celebration next year in the ACT and to hold it over the ANZAC Day period and if you went through Radschool, whether Ballarat or Laverton, no matter what course, male or female, this event is for you. It also includes your husband, wife, boy friend, girl friend etc, who can join in with us in all events except the ANZAC Day March itself unless they have served. We're all getting on a bit and this could be our last hurrah - let's make it a good one.

ANZAC Day in 2021 falls on a Sunday and we're planning to hold several events prior to that culminating in joining in the ceremonies planned around the War Memorial on ANZAC Day, including the Dawn Service, breakfast and the March itself.

We're suggesting you spend 5 nights in Canberra, commencing Wednesday night the 21st April, and leaving the ACT on Monday the 26th.

Here's what's planned.





## Wednesday 21st April.

An informal get together at the [Ainslie Football Club](#) that night. We hope to have a handout for everyone, setting out what's planned, etc.

## Thursday 22 April

We've arranged with the Army for a conducted tour of [Duntroon](#). This is a marvellous base, full of tradition and wonderful old buildings and is definitely worth a visit. This will start at 10.00am and should finish about 12.00midday. After Duntroon, we're planning we get together for lunch, unfortunately, the Corona problem has meant we haven't been able to get to Canberra to organise this, but once things return to normal we will and we'll let everyone know.

## Friday 23 April.

We've arranged a conducted tour of the AWM after which we can all lunch at [Poppy's Cafe](#) at the AWM. After lunch we'll try for a conducted tour of Parliament House - but we can't confirm that until we can get to Canberra.

## Saturday 24 April.

We've also been in touch with the ACT branch of the Air Force Association and have got approval to dedicate a plaque, remembering Radschool, in the RAAF Grove which is on the Federal Highway just inside the ACT boundary - see [HERE](#). We submitted a claim to DVA for funds to cover costs, but it was refused (see [HERE](#)). We're pursuing other sources of funds and if we can't do any good, we might be forced to ask for donations. More later.

As there's limited parking on the highway, we'll arrange a car pool system which will operate from the Ainslie Football Club car park to get everyone out there. Refreshments will be served after the dedication after which we plan returning to the Club for lunch. The rest of the afternoon is free until about 4.00pm when we can meet up again at the AWM for the "[Changing of the Guard](#)" at the tomb of the Unknown Australian Soldier, followed by the Last Post ceremony where we will lay a wreath. If the WRAAF ladies wish to join us, we will lay two. After that the day is yours as it will be an early start tomorrow.

## Sunday 25 April

Being ANZAC Day we propose attending the Dawn Service followed by the ANZAC Day March. The Dawn Service starts at 5.30am, but they suggest you get there at least 30 minutes prior to that - so no sleep-in that morning. After the Service, breakfast is served in ANZAC Hall at the War memorial, see [HERE](#). The Dawn Service and the following breakfast are wonderful and very moving events.



The breakfast costs \$45 per head and tables are arranged for 10 people. Click [HERE](#) for a sample menu. We'll have more on this after our trip to Canberra in August.

We've been in touch with the ACT Sub-branch of the RSL and have approval for us to march under the Radschool Banner. The March starts at 10.30am and will finish overall at the War Memorial at 12.30pm - that doesn't mean you're marching for 2 hours. The route for the March is along Anzac Parade, see [HERE](#), we don't know the length of the march but we'll know more after our trip down to Canberra in August. If you are not able to march, but would still like to attend, we can possibly arrange to have you carried in a vehicle, let us know in the form below. Sorry, but we can only arrange a vehicle for those with active service. We'll have more info on when and where to form up etc later.



The Dawn Service and the ANZAC Day March at the AWM are two huge events and should be on everyone's bucket list. After the March, in the tradition of ANZAC Days everywhere, we can all get together at a club for a "debrief". We're talking with the RSL for a suitable venue, more on that later too.

So we can get an idea of numbers, we know it's still a fair way off, but if you think you can make it, please fill in the form below:

First Name:

Surname:

Phone:

Email address:

Will you be partnered?

Will you need a vehicle for the March?

Comments:



## Buying a new car?

If you're a Radschool member and contemplating buying a new car, we could save you thousands. The Radschool Association has done a deal with Australia's biggest car brokers whereby you can purchase a car (your choice of make, colour, specs etc) at fleet discount prices.

One of our blokes made use of this facility recently and bought a Toyota Rav4 and saved thousands. You can too!

To see further details, go to the Radschool Assoc home page ([HERE](#)) then click on "New Car Purchase".

## Discounts.

Current financial members can now receive a 12% discount on the base rate of the day when hiring a car from Thrifty. If you're thinking of hiring a car or an SUV or a people mover, this could save you heaps. If you're a member, send us an email [HERE](#) and we'll send you the promo code.



## Charity Classification.

Early this year our Association was classified as a Charitable Organisation - see [HERE](#). This doesn't mean that donations to the Association are Tax deductible, yet, but we've applied for that and will advise if and when it occurs.

We are registered with the The Australian Charities and Not-for-profits Commission (ACNC) which is the national regulator of charities. Their web-site is [HERE](#). Being a Charitable Organisation, we don't pay tax.

We have to submit a report to the ACNC each year, ours is due 31 December. For information, following is the Balance sheet and P&L of your association WEF 31 June 2020

[Balance sheet.](#)   [Profit and loss.](#)

## Membership.

We've decided to go with the following membership.

- Full membership for \$35.00 to 30 June 2021.



There's no more annual Membership, only full Membership which will expire on the 30 June 2021.

As we've said, full membership is not compulsory, you can still receive the RAM which will remain open, free and available on the net. So, if you'd like to contribute and help us with the ever increasing costs, please join as a full member.

If you are already a member (ie: if your name is on this [LIST](#)), please fill in the form below and send it to us, if you haven't already joined (if you're not on the list), please use the form [HERE](#).

First name:  Surname:

Your email address:

Membership type:

Your State:  Sum transferred: \$

Please transfer your joining contribution to:

**BSB:** 124-021    **Account number:** 1048 7401    **Title:** RAAF Radschool Association.  
**Bank:** Bank of Queensland.  
and include your name in the "Remarks" window on the deposit.

You can of course pay more if you wish!!

**AND!!** If you work for a firm that would be kind and generous enough to sponsor the Radschool Association, please get in touch.

**RAM thought for the day.**  
Good decisions come from experience and experience comes from bad decisions.



## 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.

Thankfully, Ken Morris, who lives over in the West, proof reads our print before it goes public and points out our many errors, Thanks Ken.





## IN MEMORY OF



### Ron Fryer.

Neil Hunter advises the passing of Ron Fryer on the 6th April in Mooloolaba, QLD, after a long battle with cancer. Ron was on 1TTC in 1953. He was a WOFF TELSTECH and was at TELENG in the late 70's.

Sorry, we have no further details



## Clive Brooks.

Bob Hambling advises that Clive Brooks passed away on the 17<sup>th</sup> Sep 2019 at Ballarat. He trained on 6 Radio Apprentice course and was SOPUBS HQSC in the late 1970's and at Radschool as OIC Apprentices around 1982/3.

Sorry, we have no further details

## Geoffrey Matthews. OAM.

Ron Gretton advises the passing of retired WGCDR Geoffrey Kenneth Scott Matthews, Radio Engineer, on the 20<sup>th</sup> April 2020. Geoff had suffered health issues which had worsened over the past few months and was in palliative care in the Werribee Mercy hospital for several weeks.



He joined the RAAF as a radio apprentice in 1948 and reached the rank of WOFF. He was commissioned as Radio Engineer in the Ground radio field and his final posting was in the TELENG area of HQSC from where he retired in 1986 after 36 years of service.

Geoff held a license as a general aviation pilot for many years and owned a number of light aeroplanes. During his time in the Melbourne area, he was a long time member of the Point Cook Flying Club. The last plane he owned was a Cessna 152. He also built, and flew from Point Cook, his own RANS S7 light plane in his shed at his Werribee home. He also spent a number of years boating around the Western Port area and southern coast of Victoria.

He was a keen technical volunteer at the RAAF Museum for 18 years. Geoff was a member of a project team that built a Bristol Boxkite to commemorate 100 years of Military aviation in Australia. He was awarded the Medal of the Order of Australia in 2015 for his efforts in this Project. Another highlight was Geoff being awarded the 'Victorian Volunteer of the Year' in 2007.



## Henry Szumanski.

The Djinnang Association advises the passing of Henry Szumlanski (8TMT), in Moe Victoria on the 13<sup>th</sup> May, 2019. He was aged 68. Sorry no further details available.



## Carl Pickering.

Peter Nelms advises that Carl Pickering, RadtechA, passed away in Brisbane on the 14<sup>th</sup> May. Carl was born in India in 1948, his family emigrated to Australia and Carl joined the RAAF and was on 12 RMT. He served with 35 Sqn in Vietnam from June 1970 to Jan 1971 when he was medivaced back to Australia and had basically been in a wheelchair ever since.



## Tom Clark.

Bob Bennet advises that CpCapt Tom Clark (Ret'd) passed away on the 15<sup>th</sup> May 2020 in Canberra. Bob says he worked with Tom at HQOC in the 70's when we were both SQNLDR's and he was the specialist Elec. Engr. His final posting was as DAEENG -AF from where he retired in the mid - 80's. Tom had several strokes some years ago that left him unable to talk, but there was nothing wrong with his brain.

Funeral arrangements are unknown at this time.

## Brian Gribble.

Ted McEvoy advises the passing of Brian "Gus" Gribble on the 8<sup>th</sup> May, 2020. He was 78. Brian was an ex-RAAF navigator and served with 2 Sqn in Phan Rang from Apr 1967 to Oct 1967.

Brian's funeral was held on Wednesday the 20<sup>th</sup> May and as funeral services were, at the time, limited to 30 persons, his farewell was streamed via the internet. The link was [HERE](#).



## Hedley Thomas.

We have just been advised that Hedley Thomas AM MID, a pilot from 76SQN, 9SQN and CO of 5SQN died on the 14th Mar 2017, Aged 77. After a heroic 7 week battle with multiple medical complications, following his initial abdominal aneurism, he was unable to overcome them all and passed away at 1010 Qld time in Gold Coast Private Hospital. A steadfast companion, staunch friend, patriot, mentor and gentleman has gone.



Hedley was a 76 Squadron pilot on Vampires in the early sixties. He spent two years with the USAF as an exchange instructor on helicopters, one year in Vietnam with 9 SQN and seven months in Ismailia with UNEF II. From 1974 to 1976 he was CO 5 SQN. He left the RAAF in 1979 and flew commercially in Australia and PNG before working in Riyadh for the RSAF between 1990 - 1995 as a PC-9 flight simulator instructor. He went to Singapore in 1997 for two years as a UH-1H Flight Simulator instructor with the RSAF.



Hedley retired in 1999.

A simple celebration of his life was held in Southport (Qld) on Saturday, 18th Mar.

## **Peter Hodge.**

Beth Hodge advises that Peter passed away comfortably on 22 March 2020 after a long fight with COPD and heart problems. Peter started life as an MT Fitter on 11 Appy Course but studied languages and transferred to the intelligence section of the RAAF. He was in hospital and his son Evan, daughter Veronica, her partner Trevor and myself were with him. He is no longer in the pain he was in for so long.



Peter's funeral was held on the 11 June in Caloundra.

## **Brian Bernasconi.**

Noel Hadfield advises there was a notice in the Canberra Times on the 30<sup>th</sup> May advising that Brian Bernasconi had passed away on the 22<sup>nd</sup> May 2020 and was privately buried. Brian, who was 94 years old, had been a SqnLdr in the ENGRAD category. He had been unwell for some months and had been cared for in Calvary Care in the ACT. Sorry, no further details.



## **Charlie Rablin.**

Dick Tracy advises that Charlie Rablin passed away on the 7<sup>th</sup> April. Sorry, sorry, no further details.





## **Norville (Norm) Simpson.**

Neil Hunter advises the passing of Norville (Norm) Simpson (1TTC 61/62) on Saturday, 30 May in Mooloolaba QLD. Norm was 79 years old. Sorry, no further details.



## **Lindsay Bennett.**

Graeme Rickert advises that Lindsay Bennett passed away on Friday 5th June. He had suffered a major heart attack two weeks earlier. Lindsay was a Radio Engineer and member of No 11 Radio Apprentice Course, at Frognall. Lindsay's funeral took place on Wednesday 10th June at Great Southern Memorial Park, Mount Cotton, QLD.



## **Eddie Collas.**

Neil hunter advises it is his sad duty to inform you of the passing of Eddie Collas (2TTC 54/55) in Alice Springs on the 3rd June. Sorry, no further information available.



## **Bob MacDougall.**

Neil Hunter advised it is his sad duty to advise the passing of Bob MacDougall (9TMT), on Thursday the 11th June, Bob lived in WA. He was buried on Thursday the 18th June and because of the virus restriction on numbers, his funeral was streamed live.





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## Page 3 Girl.

**Kaye Bruce**

In May 1962 at age 19, Kaye Bruce joined the WRAAF and travelled to Point Cook to begin a WRAAF career, signing up to train as an Aircraft Plotter. Kays says:

“I had lived my early years with my parents and 3 siblings growing up in Port Kembla NSW, before the family set out in 1954 on an adventure to North Queensland where we eventually settled in Bowen, the mango capital of the world. Bowen became famous years later through the making of the movie “Australia” which was filmed in the town and surrounding areas. The film Premier was held in the open-air theatre at the seaside village of Queens Beach not far from the centre of town, where my brother was one of the projectionists.

I have many fond memories as a young teenager of those open-air movies, battling the mossies and moths especially in the evening sessions. In 1959 on completing my Junior certificate year of High School (equivalent today's Year 10), I worked as an office clerk and shop assistant for the large Magees Supermarket in Bowen. During these years I was involved in sport Swimming/Netball/Marching girls. I was a member of the Bowen Senior Marching girls' team and also coached a Junior girl's team. The part I loved most in training the Juniors was creating the diagrams and in turn, training the girls in the moves to be performed at competitions. So the marching drills whilst on our [Rookies Course](#) at Point Cook came easy to me, unlike some of my fellow recruits.

Point Cook in May/June with the freezing wind blowing off Bass Strait was a rude shock after balmy North QLD and kept us on the move. As graduation day loomed I was informed that the Aircraft Plotting course for which I had enlisted was about to commence in NSW and if I were to join it, I would miss part of my rookies qualifications and graduation that would have had to be done at a later date. However, an alternate offer was made, for me to re-muster to Air Photo Plotter working at the Central Photographic Unit (CPE) at Laverton.

I was able to spend a day at nearby Laverton to see what the work entailed, after which a decision was to be made. I dearly wanted to graduate with my course and especially with friends that I had made during the time. The visit to CPE at nearby Laverton was very informative and I met the 5 girls then working as Photographic Plotters. After some days of contemplation, I made the decision to accept the re-muster; so after graduation from Course 122, I had my first big posting,





5 km across the highway to the Central Photographic Unit at Laverton! Initially there were 6 months of 'on the job' training and then we settled into serious work requirements as the Vietnam conflict demanded more output from the unit. I enjoyed the new work, as well as competing at inter-service Netball and Swimming and instructing local marching girls.

The Mess hall at Laverton was a large, noisy experience. The WRAAF sat in an area of the hall beside where the RAD School apprentices gathered for their meals and over the years there was much entertainment to be had in witnessing the antics the young guys got up to at meal times. For example, putting salt in someone's tea instead of sugar or pepper over one's meal. I must add how comical it was to see those young boys appear with their uniforms and boots often way too big for them. Perhaps it was allowing for growth!?

The mustering was expanding and we eventually had 25 girls working at Laverton. LACW and then Corporal promotion came. Then I became involved in the training of new recruits coming through from Rookie Courses, these numbers would vary from maybe 2 girls and sometimes up to 6 at any given time. We would train the girls on all aspects of Air Photo Plotting and when they became qualified would work alongside more qualified personnel who checked the plotters work before it was signed off. I found the work very interesting and challenging at times. The only downside I felt was that Laverton was our only base for this type of work and I often thought of re-mustering to another trade that would give me a chance to experience life on other bases.

In 1965 I met my future husband, Ralph Donelan, who was an Ex Engines Apprentice working on the base at 1AD. In late 1965 I was attached to Air Base Townsville along with 4 of our girls and Photographers from CPE Laverton to work with the American Navy Aircraft division temporarily based in Townsville, who were Flying and Photographing over New Guinea on behalf of the Australian Government. That was a great experience and once the process was established, I returned to Laverton and for a period of time we rotated our girls on attachment, which was a great moral booster. Likewise, was the time in 1967 when our unit was invited on a field trip to tour the Kodak factory in Melbourne (below). We needed to have those extra activities to keep the girls motivated.



In 1966 I was promoted to Sergeant and Ralph by now held the rank of Corporal which raised some interesting issues socially while on the Base. We were married in April 1967 at Williamstown on Port Phillip Bay, Melbourne and the law being what it was at the time, I had to resign from the WRAAF.. Amazingly, we didn't know until that day, that we had chosen the church where Ralph's grandfather had been the pastor in the 1920's. After the ceremony on an invited visit through the rectory, Ralph's Mother laughingly showed us the bannister which she used to slide down all those years before!





1968 found Ralph posted to Amberley as part of the training programme for the arrival of the F111 aircraft. After renting for a few months we settled into our first home in Eastern Heights Ipswich. I had secured a clerical position with Heathers and Co at the Brisbane Markets. During 1968-69 the F111 project stalled due to a design fault and the RAAF posted many away from Amberley. We were lucky to be sent to Butterworth, Malaysia in June 1969 where we enjoyed the next 2.5 years. Our son Jason was born at the British Military hospital Minden in January 1970. We lived on the island of Penang and Ralph rode his motor bike to the ferry that took people across the Malacca Straits to the base at Butterworth.

Life there was so very different. We hired a Chinese Amah part time. Choy had previously worked for British families until they pulled out of Malaysia so she was easy to deal with and a hard worker. We shared tears when it came time to leave Penang after having her in our employ for the whole 2.5 years. To this day I often wonder what became of her. We kept ourselves very busy with our activities, Ralph playing Volleyball and as a member of the Motor Club where he successfully raced a modified English Norton motorbike at National Motor-cross and Grass-track events. I played a lot of Badminton which I enjoyed and still play once a week here on the Sunshine Coast.

We were posted from Malaya back to Amberley and May 1973 our daughter Rani was born at Ipswich Hospital. July 1973 saw Ralph attached to Oklahoma for 6 months training on F111 Fuel systems, which was a difficult period for me with two toddlers and no family support close by. Following 7 years at Amberley we were posted to Support Command Melbourne for the next 4 years; then luckily, posted back to Amberley. We built on our 'bush block' where we enjoyed the next 35 years. Ralph left the RAAF in 1988 as a Warrant Officer Engineer of 27 years and reckoned that he had finally outranked me; but he happily concedes that I have always been boss of the kitchen!



After 2 years in civvy street he returned to Amberley as a contractor working with the F111 Engine fuel systems in various capacities for the next 18 years, until retirement of the aircraft that made his position redundant in 2008.

We sold our much loved acreage at Pine Mountain in 2011 settling in the Glasshouse Mountains on the Sunshine Coast. Life has been good to us. We enjoy outback caravanning and attending many re-unions with Ralphs Engineering Apprentice friends and also, more recently, the Brisbane WRAAF get-togethers.

We both consider our family to be our greatest achievement. With our children happily married and thriving with six very active teenage grandchildren in Brisbane, whom we are immensely proud of. We are lucky indeed that our own health is still good enough to continue sharing their significant milestones."

Old age is all about losing your marvels.





## Radschool Volleyball, 1983?



**Back Row L-R:** Frank Oostenbroek, don't know, don't know, Sam Norman.  
**Front Row L-R:** Don't know, Ric Lovett, Vince Noyes, Dallas Leach.

## Neppyng



Peter Rundle, Randal McFarlane





**Back Row L-R:** Don't know, Don't know, Don't know, Phil Pluis, Don't know.  
**Middle Row L-R:** Adrian Hunter, Don't know, Don't know, Don't know, Don't know,  
**Front Row L-R:** Don't know, Mick Donlan, Don't know.

## Not where you want to take a bullet.



35 sqn Caribou, Vung Tau, 1968.



## Mirage retirement.

13 December, 1985



L-R: Gordon "Pud" Passmore, Bruce Wood, Steve Low, Floyd Wilson.



Eric Lunberg.



## Aircraft maintenance, Darwin. 1972.

If anyone can help with the missing names, please do.



**Back Row L-R:** Stebbens, Wilson, Tooth, Don't know, Lurch, Bill Coyer, Mick Smith, Curran, Don't know, Ryan, Don't know, Holloway, Volk, Don't know, Jesinowski, Don't know, Don't know, .

**Front Row L-R:** Twomey, Richardson, Twomey, Adamson, Betts, Gatfield, Hart, Cavill, Romkes, Gnezdiloff, Don't know, Don't know, Stringfellow,

The world has turned upside down.  
Old folks are sneaking out of the house and their kids are yelling at them to stay indoors!





## A lowered DC-3.



Iwakuni, Japan, 1954. A Douglas C47 Dakota transport aircraft being towed to the base maintenance hangars. It appears the aircraft, No. A65-97, had a landing gear failure during take-off resulting in damage to both engines and propellers. They say they corner better lowered.

## Lincoln Crew, 1958.



Standing 2<sup>nd</sup> from Left, KV Robertson, CO 1 Sqn.



Surplus vehicles stored at Seymour Vic after WW2, 1946.

## Lincolns at Tengah, Singapore, 1954.



1 Sqn in Singapore, during Malayan Emergency.





1B Squadron, CO, Clarence "Spud" Spurgeon boarding his Lincoln at Tengah Singapore. 1955

A joke is something we used to tell before people became offended by everything.





## 1 Sqn – Operation Termite

8 July 1954.



L-R: Co-pilot Sgt Wyatt, Gunner FSgt Roy Cosgrove, Bomb Aimer FSgt Keenan, 1st Signaller WO Kevin Ryan, Air Officer Commanding AVM McDonald, Wng Cdr Hugh Francis Moore, Navigator PO Pat Fitzgibbon and 2nd Signaller Sgt Weston.

## 1 Sqn, Tengah, Singapore.

Late 1950s.





L-R: PO Len Hilton, PO Terry Meagher, FSgt Jim Glover, Sgt Kim Hunt, Sgt Bill Smyth Sgt Erik Sunstrup, FO Peter Heardon.

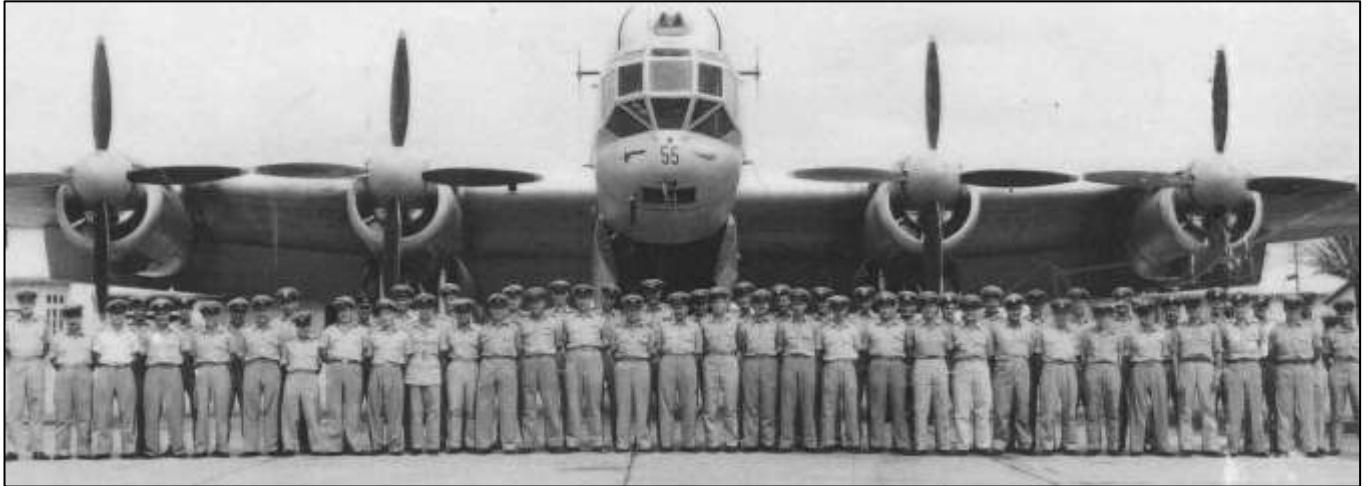
## 1 Sqn Crew changeover, Qantas DC4, July 1950.







Group photograph of the aircrew personnel of No 1(B) Squadron, RAAF, which was stationed at RAF Tengah during the Malayan Emergency. One of their aircraft, Lincoln bomber A73-43, is in the background. Wing Commander A. Emslie, the Commanding Officer is in the centre of the front row.



## Australian Advisory Force Vietnam HQ. Feb 1971



**Front Row L-R:** Lt Col L Logan; Lt Col K L MacPherson; Lt Col J Mapson; Col J R Salmon; AirCom Clarence Spurgeon; Lt Col J C Gentles; Lt Col D T Rennie; Maj C Morrissey.

**Second Row L-R:** Maj N A Paisley; Maj Gen C A E Fraser; Maj B A Gosman



**Third Row L-R:** Lt Col R G Mills; Lt Col C Banfield; Maj F R Jackson; Lt Col M L Sheehan; Wg Cdr Alex Rundle

**Fourth Row L-R:** Maj M C Mules; Maj W D Mostyn; Maj A J Corboy; Squadron Leader George Purves

**Fifth Row L-R:** Capt N S Pierce; Don't know; Capt A F Beecham; Maj J F Williams

**Sixth Row L-R:** Don't know; Capt W J Hatcher; 2<sup>nd</sup> Lt G F Healy; Don't know; Sqn Ldr Norbert B Williams

**Seventh Row L-R:** Capt P Spence; Maj M D Russell; Maj N Hill; 2<sup>nd</sup> Lt I D Peachey; Don't know; Capt D W Roberts; Maj W P Smith; Capt A G Lawson; Sqn Ldr Alf H Williams; Don't know; Don't know; Maj R A Vickery

**Eighth Row L-R:** Don't know; Capt G V P Noonan; Don't know; Don't know; Capt K J Grayson; Maj D Elliott; Don't know; Capt G S Ross, (accidentally killed 9 February 1971).

## 1Sqn (Phantom) Formation Team.



**Back Row L-R:** Ivan Skipworth, Lyall Klafter (CO), Marty Susans, Bren Roberts.

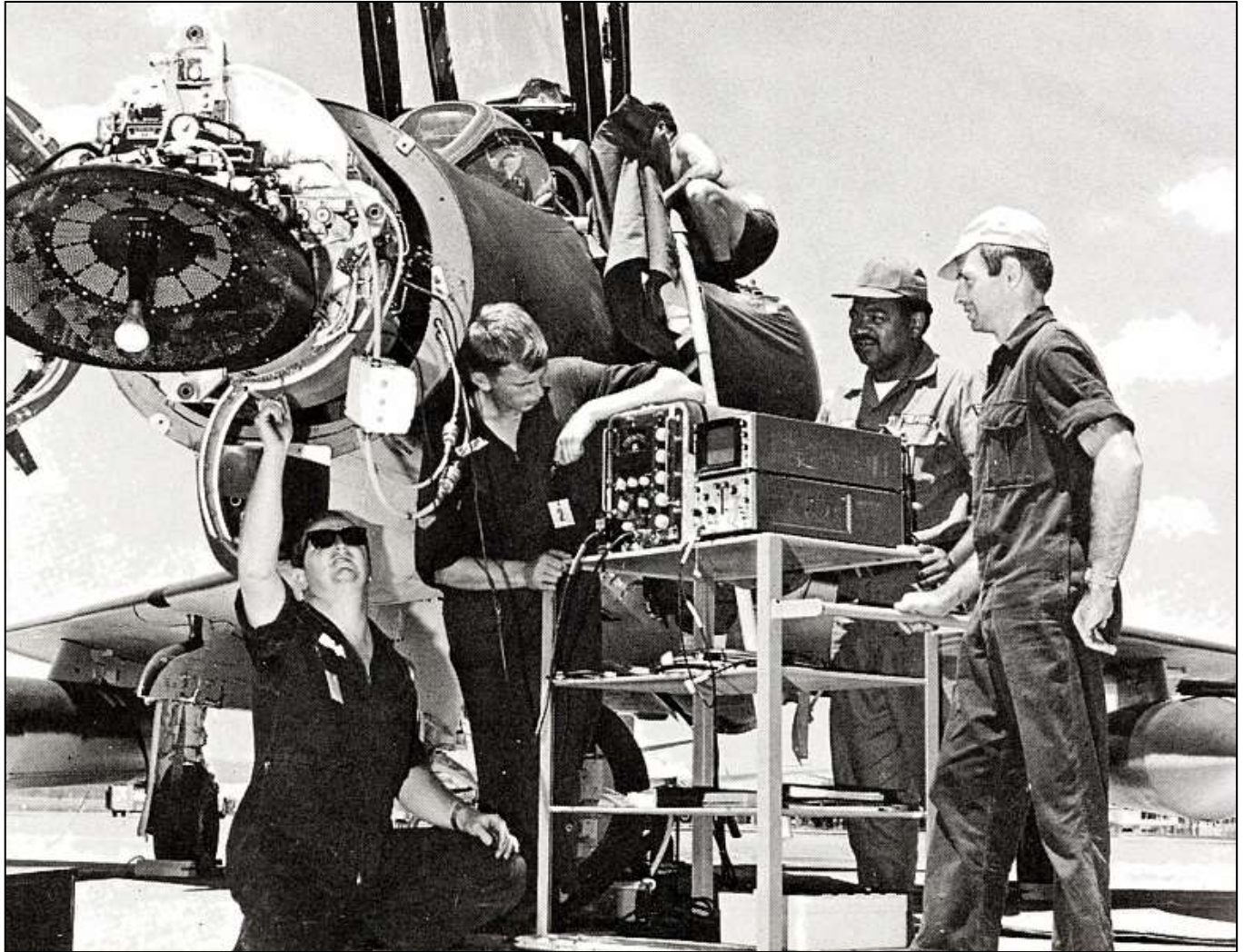
**Kneeling L-R:** John Wilkinson, Neil Pollock, Pete Growder, Noel Ryan.





(The following pics were taken from the Phantom pages)

## APQ-120 Phantom Radar.



LAC Bryant, Cpl McCombe, US Sgt, LAC Zscheh

This virus has done what no woman has been able to do,  
cancel all sports, shut down all bars and keep men at home!!!



## 1 Sqn, Amberley, 1970.



3<sup>rd</sup> July 1965.

Major Casper 'Cas' Bierman USAF (left) and PLTOFF Dave Rogers, then a 79 Sqn Sabre pilot. Dave had scored a ride in a Phantom at Ubon AFB, Thailand.







## 1000 hours – 1971.



SQNLDR Ken Smith astride Snoopy's Kennel celebrating being the RAAF's first Phantom pilot to attain 1,000 Hours on F-4s. This total includes about 700 Hours on exchange with the USAF.



Robert Montgomery (left), Ken Smith on Snoopy's kennel, Dave Rogers and Bill Best.



## 6 Sqn Crews – Townsville 1971



## 82 Wing Display pilots – 1972



L-R: Dave Rogers, Al Reed, Robert Montgomery, Brian Fooks



## Operation Pepper Pot, – Darwin, Oct - Nov 1971

The Phlyers and Phixers.

### 1 Sqn



### 6 Sqn







## Record holders, May 1972.



**L-R:** Clint Rowland, Gus Hannam, Al Reed, Brian Bolger.

A pair of Phantoms set a (then) record for flight time from Darwin to Amberley (tower to tower) of 2 hours, 37 minutes and 52 seconds. As the distance is 1,865 klms – their average speed was 710 klm.hour.

I never thought the comment "I wouldn't touch him/her with a 10 foot barge pole" would become a national policy, but here we are!



Bren Roberts and Noel Ryan with AIM-7 Sparrow missile

The AIM-7 Sparrow was an American, medium-range, semi-active, radar homing, air-to-air missile with a high-explosive warhead operated by the United States Military as well as other various air forces and navies. Sparrow and its derivatives were the West's principal beyond visual range (BVR) air-to-air missile from the late 1950s until the 1990s. It remains in service in some countries but is being phased out.

The early Sparrow was intended primarily for use against larger targets, especially bombers and had numerous operational limitations in other uses. Against smaller targets, the need to receive a strong reflected radar signal made achieving lock-on at the missile's effective range difficult. As the launching aircraft's own radar is needed to be pointed at the target throughout the engagement, this meant that in fighter-vs-fighter combat the enemy fighter would often approach within the range of shorter-range infrared homing missiles while the launching aircraft had to continue flying towards its target. Additionally, early models were only effective against targets at roughly the same or higher altitudes, below which reflections from the ground became a problem.





Over the years the Sparrow has been upgraded and to date over 60,000 examples of the missile have been produced in many different production models. This air-to-air missile family includes the following systems: AIM-7A, -7B, -7C, -7D, -7E, -7F, -7G, -7M, -7P, and -7R. The AIM-7M features a larger motor than earlier versions (for increased range), and its heavier warhead is mounted forward of the wings, rather than aft as on previous models. Upgraded electronics are also employed. The 7M incorporates increased end-game manoeuvrability for evasive targets.

There are now air to ground and ground to air models.

## Hand over, take over.



Al Reed, retiring as CO of 6Sqn in June 1972, being congratulated by the Phamous Phantom Spook at Amberley.



## Farewelling an old friend.

6 Sqn crews toasting the last flight of the Phantom on the 4<sup>th</sup> October, 1972



**Standing L-R:** Keith Padgett, Bill Best, Mick Nott, Ken Smith, Dave Rogers, Greg Herring, John Ross, Bob Moloney, Brian Fooks DFC, Clint Rowland, John Reis  
**Front Row L-R:** Pete Salvair, Bob Montgomery, Brian Bolger DFC, Lindsay Egan, Bob Sivyer, John Bushell.

You think it's bad now?  
In 20 years our country will be run by people home-schooled by day drinkers.



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Welcome again to [Jaycar](#) as the sponsor of Sam's "Computers and Stuff" page. As they are prepared to support us, please show your appreciation and support them. There's always a store near you, click [HERE](#) to find the closest.

**Beware the privacy and security risks of TechTalks smart speakers.**

*"You can turn it off?" he said.*

*"Yes" said O'Brien, "we can turn it off. We have that privilege."*



*From 1984 by George Orwell, describing Winston Smith's amazement that Party Official O'Brien was allowed to turn off the device that listens to conversations the whole time. Orwell would have been astounded if he could have known that 70 years after his book was written, people not only had such devices in their homes, but that they had actually gone out and bought them.*



Would you be willing to equip your bedroom or living room with an internet-connected microphone that could record and send all your conversations to the data-hungry server of a giant tech company or to a random person in your contact list?

That is basically the privacy and security risk you're taking when you bring home an Amazon Echo, Google Home or other smart speaker.

Since the introduction of the Echo in 2014, smart speakers have moved from a niche domain for geeks and gadget freaks to an inherent part of the lives of tens of millions of people in the U.S. and across the world. Thanks to advances in artificial intelligence and [natural language processing \(NLP\)](#), smart speakers provide us with a hands-free and easy-to-use interface to interact with computers and accomplish tasks that previously required a display and input devices such as a mouse and keyboard.



The convenience and benefits of smart speakers are obvious, but like every other technology they come with their own tradeoffs, highlighted by the many stories that have raised, and exaggerated, concerns about the security and privacy implications of having a smart speaker in your home. Here's what you need to know.

### **Smart speakers are always listening**

Smart speakers become activated with a "wake word." For the Echo, it's "Alexa," and for the Google Home, it's "OK Google." After hearing the wake word, the smart speaker starts analysing whatever comes after it. But to catch the wake word, smart speakers have to keep their microphone active at all time, which is why they call them "always listening" devices.

This has raised concerns about Amazon and Google listening to and storing all your conversations, especially after stories surfaced in which Alexa recorded and shared users' voices without being ordered to do so. However, while smart speakers' "always listening" mode is a privacy issue, it's often exaggerated.

Echo and Google Home must send conversations to their cloud servers because the AI algorithms that analyse and process voice commands require processing capabilities that the devices don't possess. The device doesn't send anything to the cloud before the wake word triggers it. In fact, Google and Amazon would be overwhelmed with useless data if they were recording their smart speakers all day long.





However, this doesn't mean that a smart speaker, which is basically a computer packed with a microphone and an internet connection, doesn't have the capability to record and store your conversations in the cloud. In fact, if it's hacked, or if it malfunctions, that's exactly what will happen.

But then again, the same threats apply to your phone, which is also a computer with a microphone (and a camera and GPS) and connected to the internet and you always carry it with you instead of letting it sit on a table in your living room.

### Data stored in the cloud.

Both Google and Amazon keep a copy of every voice command you send their smart speakers in the cloud. They do so to "improve their services." This means that if someone gets a hold of your phone, they'll be able to go through your recorded conversations by accessing the Amazon or Google account associated with your smart speaker. Or if the police serve a warrant, the law of the land and the manufacturer's devotion to user privacy will determine whether they'll get access to voice recordings stored in the cloud.

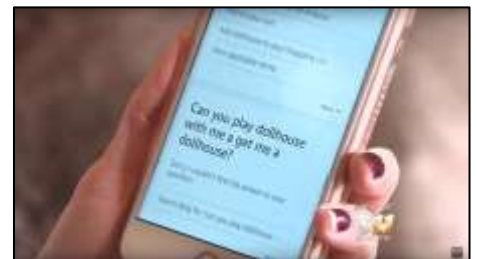


But again, this is basically no different from someone gaining access to your email account and reading through your emails. Like all online accounts, using two-factor authentication and strong passwords is an effective measure to prevent unwanted access to your recordings, however, in contrast to email and messaging services, which offer a range of privacy settings such as PGP and strong, end-to-end encryption, using smart speakers is predicated on letting the manufacturer collect and process your voice.

Users can also go through the accounts linked to their smart speakers and delete their recording history, but it will probably affect the performance of the device.

### Unwanted triggering of commands

Smart speakers are pretty decent at answering to queries for information such as the time, the weather and appointments, but the real convenience they bring to consumers' lives is the accomplishment of tasks. Alexa and Home support thousands of applications such as setting up alarms, playing music, placing orders, setting appointments and more. They're also capable of manipulating IoT devices such as smart door locks, air conditioners, coffee makers, fridges, toasters and a bunch of other useless stuff.



What this means is that anyone who's within the hearing range of your smart speaker will be able to send it commands to perform functions. All they need to do is say the magic word. Of course, this can happen if someone breaks into your home (in which case you'll have bigger problems



than your Amazon Echo being used without your permission), but what if your smart speaker was close enough to the window for someone from outside to order it to unlock the door?

Both Echo and Home have also shown that a person doesn't necessarily need to be within their vicinity to activate them. Smart speakers will take command from any device that can play an audio file that says the wake word. Last year, Burger King ran a [TV commercial](#) that asked Google to explain what a Whopper is. Tests showed that when a Google Home device was next to the device that played the commercial, it would start describing the whopper.

Another episode involved a 6-year-old kid who accidentally (or intentionally maybe?) ordered an expensive dollhouse while playing with the Amazon Echo in her family's home. Afterwards, a local morning show covered the story and the anchor made a remark about Alexa ordering dollhouses, which triggered even more unwanted orders and refunds. This shows how smart speakers can cause innocent (and sometimes expensive) accidents.

Beyond accidents however, there are real security implications for the remote activation of smart speakers. For instance, a hacker could lure a victim to a malicious website that runs an audio file of a command for Alexa or Google Home. Given the number of functions that the devices can perform, there are many ways this functionality can be put to evil use, such as unlocking doors, making money transfers and more.

Smart speakers usually have settings that add security checks to functions such as shopping. They also have settings that link profiles and functions to specific voices. Users who care for their security should activate those or avoid using smart speakers for critical tasks altogether.

### Adversarial attacks

One of creepier security threats of smart speakers is what is known as "adversarial attacks" in which malicious actors send commands to the devices by exploiting weaknesses in the AI algorithms that power them. The way deep learning algorithms and deep neural networks analyse and process audio is different from that of humans. With meticulous work, a malicious actor can create an audio file that sends a hidden command to a smart speaker while sounding like music to human ears.



Adversarial attacks against smart speakers are still in proof-of-concept stage and there still hasn't been a real-world example of the Echo or Home being compromised in this manner, but it's only a matter of time before hackers find ways to put them to destructive use. Unfortunately, there's not much users can do about this and it will be up to manufacturers to harden their devices to minimize the risk of their AI algorithms being exploited to harm their customers.

### Closing thoughts

We often misunderstand and exaggerate the security and privacy implications of smart speakers. Where privacy and personal information are concerned, the security threats of smart speakers



run parallel to that of other services we've been using for the past decades. The appearance and methods might be different, but the nature is the same.

However, what makes the smart speaker security important is the access they have to our physical world and daily life. As we increasingly trust smart speakers to accomplish tasks on our behalf in our homes, cars and offices, we must also be wary of who else will be able to do the same.

How do those dead bugs get into enclosed light fixtures?

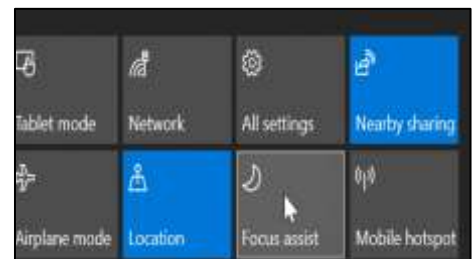
## Focus.



If you look, you'll find your computer has tools and applications to help you stay focused on your work. Microsoft has been hard at work making features available that protect us from the other features they created to keep us connected. Finding that balance is a real problem for everyone these days. We need to be connected and responsive but we also need to be able to get some work done. Blocking out all of the distractions is what these focus tools are all about. Here are a few that will help you.

### Focus Assist.

Focus Assist is the flagship tool that Microsoft has been refining since Windows 8. By pressing Focus Assist in the notification area, you can immediately stop your computer from popping up notifications. (the "Notification Area" is accessed by clicking the small square with the V at the bottom to the right of the time indicator on the task bar at the bottom right of your screen see [HERE](#).) If you don't see the icons at right, you might need to click *Expand* to see them. You can also configure activities and a time range that when you enter that activity or time range your computer automatically goes into Focus Assist.



To start Focus Assist, click on your notifications centre, then press the Focus Assist button. You can press it multiple times to toggle through Priority only, Alarms only, and off.

To customize your automatic Focus Assist settings, press your Windows key, type Focus Assist, in the little window bottom left and open *Focus Assist Settings*. It's not obvious but once you turn on the "During these times" option, you can click the hours and it will let you set a time range. So maybe rather than overnight, you want it to be from 10 a.m.-12 p.m., for example. You can do that.



### Focus assist

Choose which notification you'd like to see and hear so you can stay focused. The rest will go straight to action center where you can see them any time.

- Off**  
Get all notifications from your apps and contacts.
- Priority only**  
See only selected notifications from the priority list. The rest will go straight to action center.  
[Customize your priority list](#)
- Alarms only**  
Hide all notifications, except for alarms.

### Automatic rules

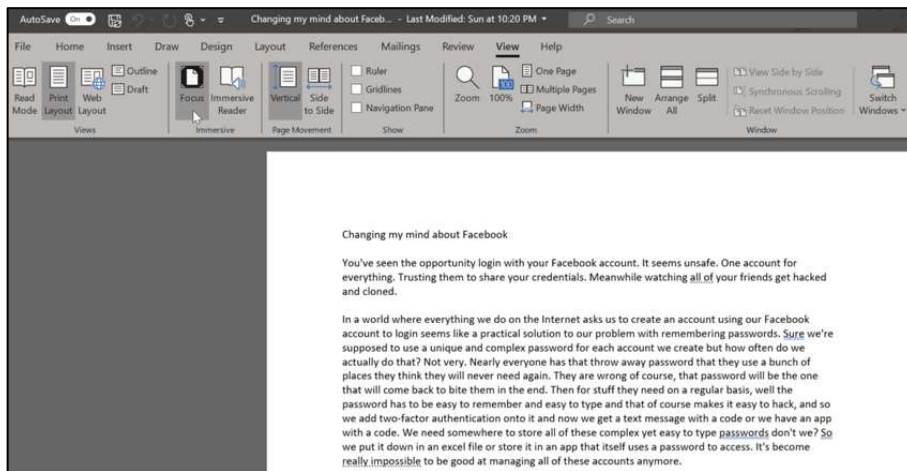
Choose the times and activities when you don't want to be disturbed, and focus assist will turn on automatically.

- During these times**  
11:00 PM - 7:00 AM; Priority only  Off
- When I'm duplicating my display**  
Alarms only  On
- When I'm playing a game**  
Priority only  On
- When I'm using an app in full screen mode**  
Off  On

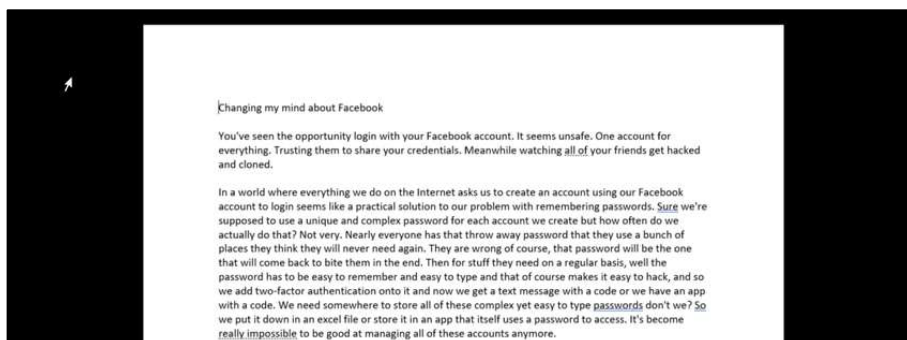
Show me a summary of what I missed while focus assist was on

## Word Focus View.

Microsoft Word has a focus view for Office 365 subscribers only. To enter focus mode in Word you go to the View menu and choose Focus in the Immersive tag (below). Basically, Focus mode in Word is a page on a blank screen. All of the menus go away. Focus mode is for when you just want to get the words down on the page.



The page above becomes the page below when focusing:





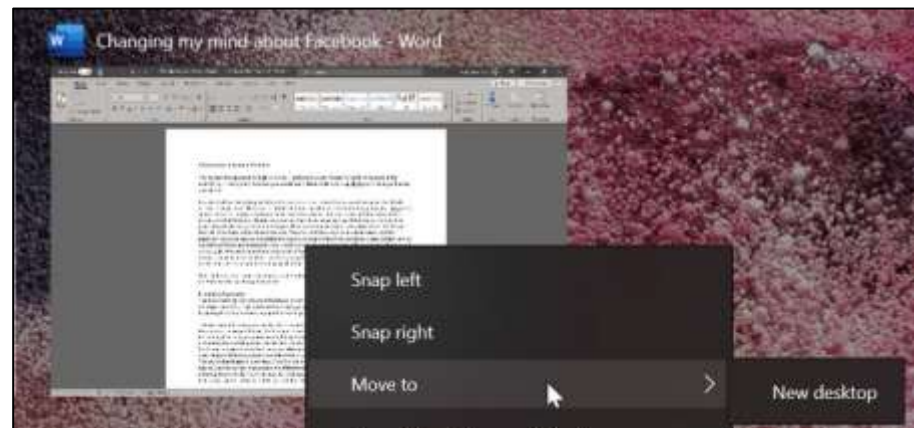


You exit focus mode by pressing Esc to get the menus back. Most people will find they are so used to the menus that they will find writing without them to be somewhat unsettling. But there certainly are no distractions.

### Windows 10 virtual desktops.

In Windows 10 you can create virtual desktops. A virtual desktop is just another name for multiple desktops. This means that when you're ready to work on something you can leave behind your default desktop and move onto the desktop space that has only the applications that you need to complete the job. All of the distractions will be left behind, too.

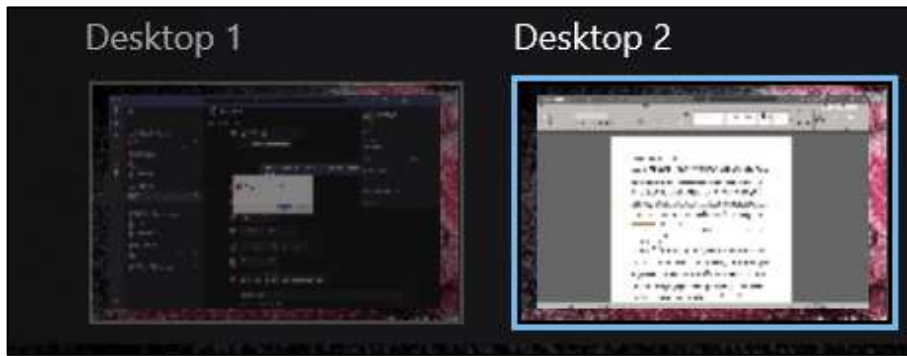
If you want to remove distractions while working on a Word document, you could move it onto a new desktop by clicking on Task View on your Windows taskbar, then right-clicking on the Word applications and choose Move to, *New desktop*. (You access the *Task View* by clicking this small icon



When you do, you'll be presented with a choice of desktops. Desktop 1 is the main desktop and the others are virtual.

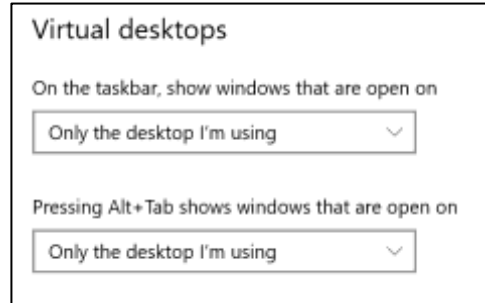


After you choose Desktop 2, the Word document you're using disappears from Desktop 1 and moves onto Desktop 2.



Since Word is your only open application on Desktop 2 you're not distracted by any other applications or notifications.


You have two settings in Windows Settings for virtual desktops. These are whether to show the applications that you have pinned to your taskbar or not and whether or not you want Alt-tab to allow you to switch between applications on your virtual desktops.

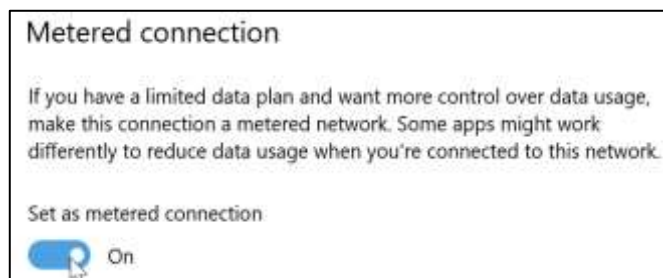
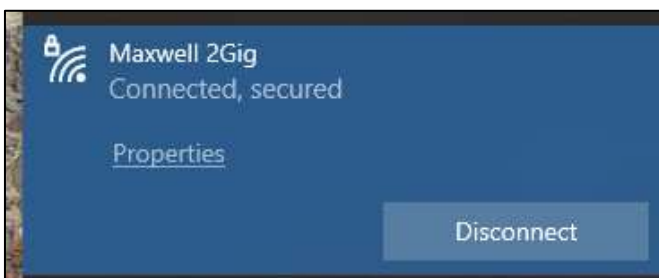


You could find virtual desktops handy when you have a deadline and really need to disconnect from everything else that might be happening. To switch between desktops, use Windows+CTRL, then the left or right arrow to move between them.

### Metered Connections and Quiet Time.

Microsoft probably didn't intend for these two features to be used to create focused time but they work. Metered connections are a type of WiFi service where you have a limited amount of data usage available to you. When you mark a WiFi connection as metered, Microsoft will pause updates but it also ends up reducing the number of distractions caused by applications asking for your attention. The result of minimizing data usage is that your apps get less annoying too. It's wise though not to have your device running on Metred Connections full time as this will not allow your device to update itself. It is very important that you allow your device to install all and every update made available by your OS and also your anti-virus software.

To make a WiFi connection a metered connection, click the connection icon, that's this little icon down the bottom right of your task bar  then click properties. Flip the Metered Connection setting to on. Don't forget to turn it off again after you're finished.





My wife said that if I don't get off my computer and help with the dishes she'll slam my head on the keyboard, but I think she's jokiasdfasdfq23r41234asdfasdfasdfqr45123451345sdgfasdggf

## Introducing Microsoft 365.

On the 21<sup>st</sup> April 2020, Office 365 became Microsoft 365. Your subscription still includes everything you enjoyed previously, such as premium Microsoft Word, Excel, OneNote, PowerPoint and Outlook apps as well as 1 TB of OneDrive cloud storage, plus, you can still share your subscription with up to five other people. There's more info [HERE](#).

## This Video File cannot be played?

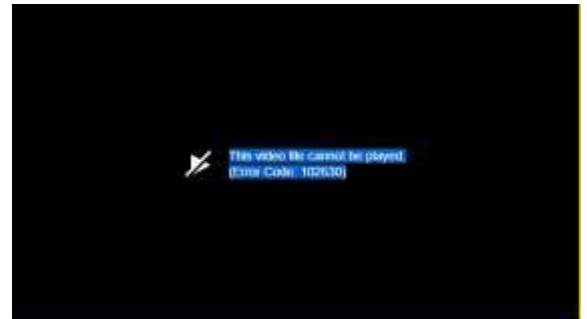


Are you getting "This Video File cannot be Played" error on your device? Read on and learn every possible fix for the different "videos not playing" errors.

The videos not playing issue can be encountered by most browsers as well as Android phones. Since there could be all kinds of reasons for this, we need to first diagnose the problem and later resolve it.

### Part 1: Why are you unable to Play Videos?

Before we get into the details, it is important to know why you are getting the file could not be played issue. Ideally, it can be caused due to the following reasons:



- The video you are trying to play can be corrupted.
- There might be some issue with the media player installed on your device.
- You might be using an old or corrupted browser.
- The video you are trying to play might not be supported by your browser.
- The browser might not have the needed extension or an add-on player installed.
- If the file has been hosted online, then it can become unavailable or corrupt.
- You can no longer have the access to the file anymore.
- A faulty extension or browser add-on can also cause this problem.
- You might be trying to play the video that is not allowed in your location.
- A VPN or third-party firewall could have blocked the video playback.

Apart from this, there could be any other software related issues for videos not playing on a phone or computer.

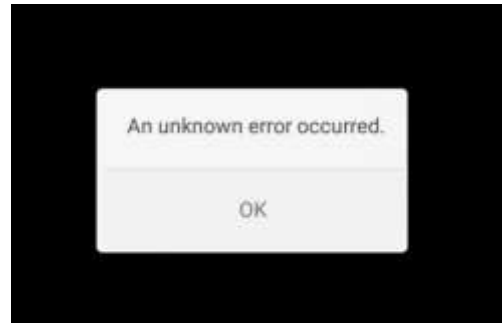


## Part 2: How to Fix General “This Video File Cannot Be Played” Error Codes?

Following are some common errors that users encounter while playing a video on their computers or handheld devices.

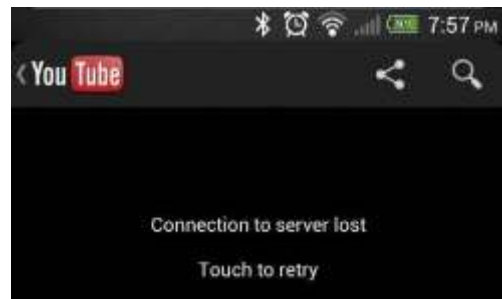
### An Error has Occurred.

This is one of the most general errors for videos not playing. It mostly occurs when the internet connection on the device is lost in between or the video has been removed from the server. Try to replay the video and make sure you have a stable internet connection to fix it.



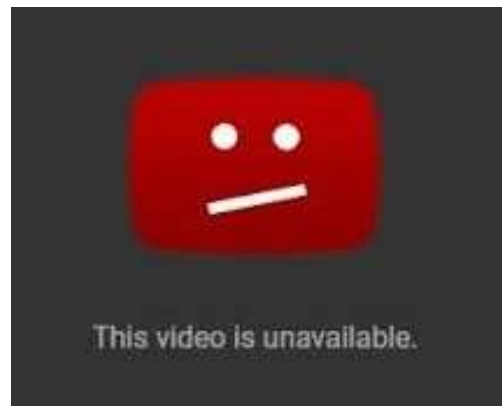
### Connection to Server lost .

As the error message states, the issue happens when the device loses its connection to the internet. Just make sure that the phone or the computer is connected to a stable internet connection. Also, check if the video is available on its main server or not.



### The Video is Unavailable.

If you are unable to play a video and have got the error, then it means the video has been removed or deleted from its original location. The situation is more common in Google Drive videos not playing when the content gets removed from its source. Platforms like YouTube could have deleted the video if it was violating its terms and conditions.



### Video Error 500

This video file cannot be played error is more common in streaming services like Amazon Prime, Hulu, Netflix, YouTube, and so on. It usually happens due to an internal problem with the browser. If you cannot play a video due to this, then just consider clearing the browser’s cache. Just launch the browser, hold down the CTRL and SHIFT keys then press the DELETE key.

### This Video File Cannot be Played (Error 102630)

This is a scenario for videos not playing on Android for third-party media players. For instance, the JW Media Player often displays the “This Video File Cannot be Played: Error 102630” when the app is corrupted. You can easily fix the issue by reinstalling or updating the app. Alternatively, you can try any other media player and check if the file could not be played or not.





Apart from this, there could be several other errors that are caused by browser, app, or the device itself.

### Part 3: Fix “This Video File Cannot Be Played” in Different Scenarios

Not just Android phones, a lot of people are unable to play videos on their computers or browsers as well. Following are some of these major cases for videos not playing that you can encounter (and fix).

#### Situation 1: Computer Not Playing the Stored Videos

If the video is already saved on your computer and you are not able to fix it, then there might be an issue with the player or the video itself. To fix “This video file cannot be played”, you can try to play the video with another player or repair the corrupted video as well.

##### Fix 1: Use another Media Player

Chances are that there could be a problem with the media player that you are using. In this case, you can just try another media player and check if the video is getting played or not. For instance, if the MOV video player is displaying an error, then you can use Windows Media Player or VLC Player instead.

##### Fix 2: Repair the Video using a Professional Tool

If the video has been corrupted, then you can use a professional tool like Recoverit [Video Repair](#). It is a user-friendly DIY tool that can repair videos of every major format like MOV, MKV, MP4, FLV, AVI, and more. (It is not free, you must pay for it). From a logical error in the file to syncing problems and video corruption to frozen videos – the application can fix the videos not playing issue under all scenarios. It features two different repairing modes – quick and advanced video repair that you can choose as per your requirements. If you want it, you can download it here [Download | Win](#) [Download | Mac](#)

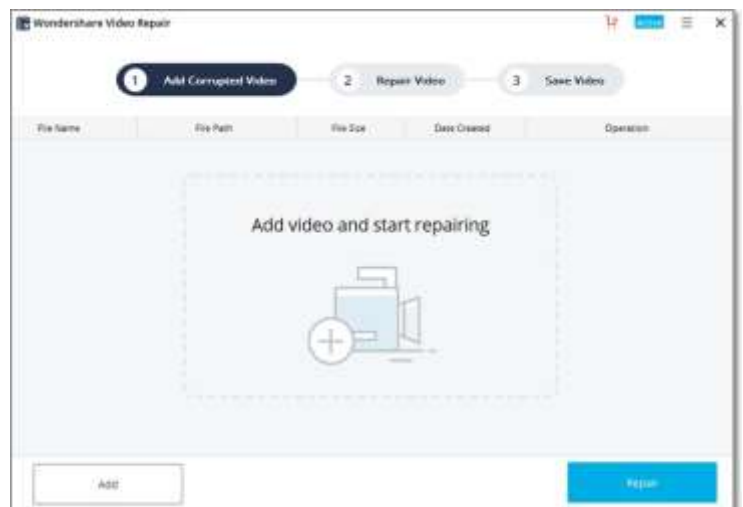
With the software, you can follow these simple steps to repair the saved videos on your computer.

##### Step 1: Load the corrupted or damaged videos

To start with, just install and launch the Recoverit Video Repair application on your computer. Now, just drag the videos you wish to repair and drop them on the interface. You can also click on the “+” button to launch a browser window to select multiple videos to load.

##### Step 2: Repair the added videos

Once the videos are added, you can just click on the “Repair” button to start the process. You can load a single or multiple





videos as per your requirements. Let the application complete the process and don't halt it in between to get the best results.

**Step 3: Save the repaired videos**

In the end, you will be notified when the video repairing process is completed. You can now just save the repaired videos wherever you want on your system.

**Step 4: Perform an advanced repair (optional)**

If it fails to repair the broken video in Quick mode, then click on the "Advanced Repair" option on the interface. This will ask you to upload a sample video that is of the same format and was shot on the same device. The application will keep it as a reference to perform a more sophisticated repairing operation on the video. Finally, click Repair button to repair your video.

**Situation 1: Videos Not Playing on Android**

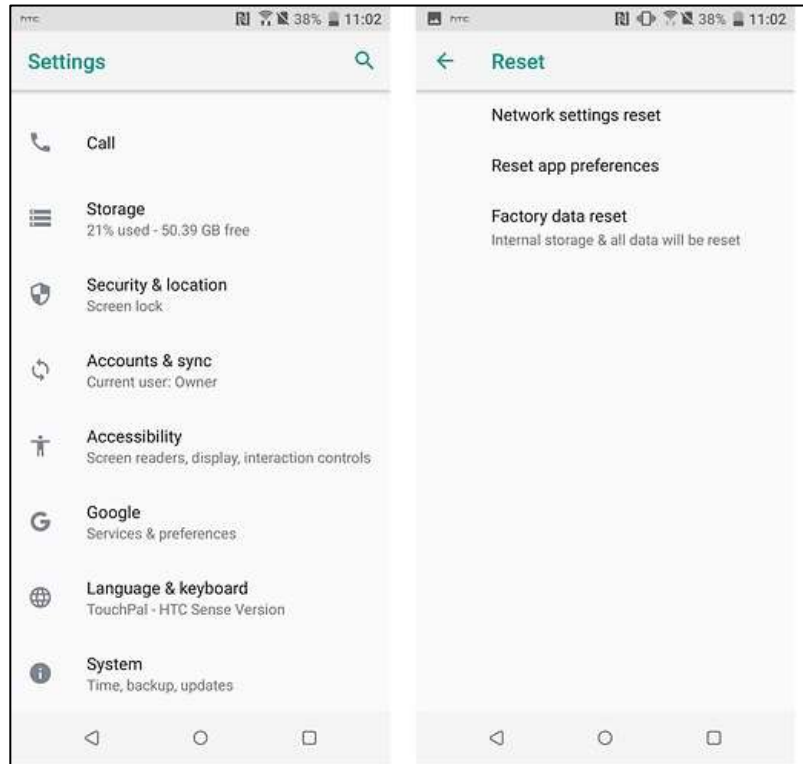
As well as videos not playing on your computer, you can also get the "This video file cannot be played" on an Android. The error can be caused due to a malfunctioning application or system settings.

**Fix 1: Reset network settings.**

The videos not playing error can arise due to some change in the network settings on the device. To fix this, you can just reset its network settings by visiting its Settings > Reset or WiFi & Network Settings.

**Fix 2: Update the App.**

If the videos are not playing on an Android phone for particular apps, then you can consider updating them. For instance, if you are not able to play videos on YouTube, then just go to the Play Store, look for YouTube, and update it. If you are using an old app, then you would get an option to update it on its interface as well.



**Situation 2, Error Loading Media: File could not be played on Chrome**

Sometimes, users are unable to play a video specifically on Google Chrome. In this case, you can try any other browser (like Firefox or Opera) and check if the problem sustains or not. Otherwise, there might be an issue with your device instead.

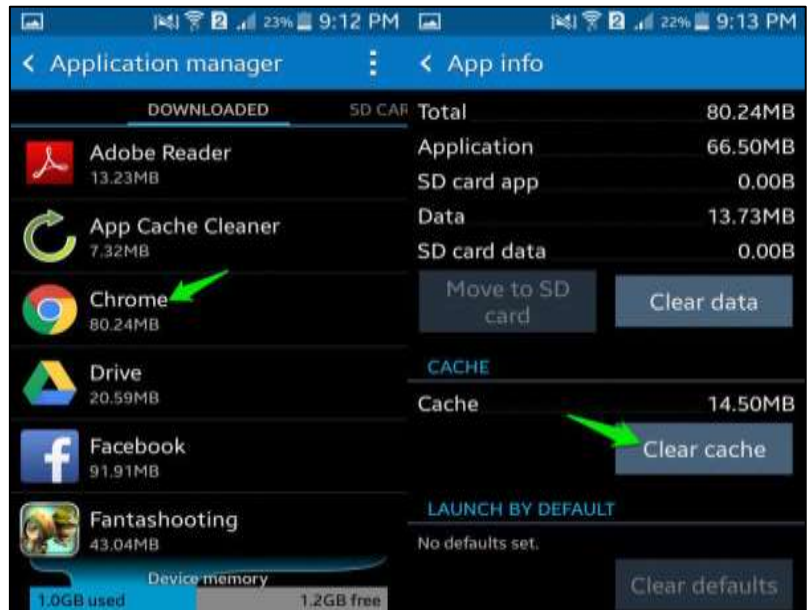


**Fix 1: Check network connections**

Needless to say, your device should be connected to an active network. You can also turn on the mobile data on it to further check the problem. Also, turn on the Airplane mode and turn it off after a while. Now, try to access the video again and check if the file could not be played or not.

**Fix 2: Clear Chrome Cache**

If the Google Chrome application has accumulated a lot of data, then it can cause the videos not playing problem. To fix this, just go to your device's Settings > Apps or Application Manager. From here, select the Chrome application and tap on the "Clear Cache" button.



**Situation 3: This Video File Cannot Be Played on Google Drive**

There are times when users are unable to play the video on Google Drive. This can happen while accessing Google Drive on their browser or via its dedicated application.

**Fix 1: Clear browser history**

If you are accessing Google Drive on any browser, then you can just go to its settings and choose to clear the browser history. After that, close the application, and restart it to access the video.

**Fix 2: Check the video format and resolution**

Google Drive does not support every video format and resolution. Therefore, before you upload a video, make sure that the format and resolution are supported by Google Drive.

**Fix 3: Check if the video is still available**

If you are trying to access a video on Google Drive that is hosted by someone else, then check its availability. The video could be deleted or the owner might have revoked the permission to the video access.

**Situation 4: Cannot Play Video on Media Player**

Lastly, you might encounter the videos not playing on your phone while browsing certain apps like Facebook or Twitter. In this case, you can just close the app from running in the background and reopen it. If it won't resolve the videos not playing issue, then go to the Play Store and consider updating the app. You can also delete the app and later reinstall it on your device as well.

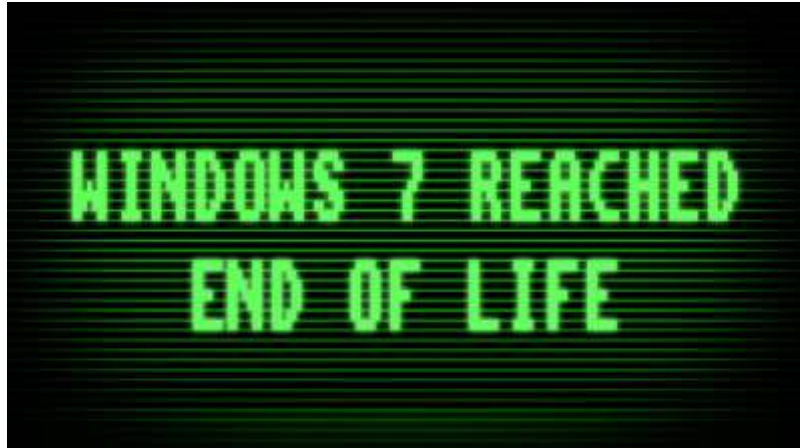


## Windows 7 – EOL.



End-of-life (EOL) is an expression commonly used by software vendors to indicate that a product or version of a product has reached the end of usefulness in the eyes of the vendor. Many companies, including Microsoft, announce the EOL dates for their products far in advance.

Every Windows product has a lifecycle. The lifecycle begins when a product is released and ends when it's no longer supported. Knowing key dates in this lifecycle helps you make informed decisions about when to update, upgrade, or make other changes to your software.



For those that are unaware, Windows 7 reached EOL on the 14<sup>th</sup> January, 2020. When a Windows Operating System (OS) hits the end of its lifecycle, it no longer receives updates from Microsoft. That means Microsoft no longer supports users of Windows 7, and Windows 7 will no longer receive updates, although Microsoft has been known to make exceptions for urgent vulnerabilities, and while organizations may be able to extend support by paying for it, home users are advised to move on to more modern operating systems.

Now is the time to shift to Windows 10. Get robust security features, enhanced performance, and flexible management to keep your employees productive and secure. If cybercriminals discover a vulnerability in Windows 7, there is no guarantee that this vulnerability will be patched by Microsoft and while there is still a large Windows 7 user base, it pays off for the cybercriminals to weaponize such a vulnerability and use it to their advantage. Keep in mind that most of the exploit kits active in the wild focus on older vulnerabilities, which will not be patched if you are using EOL software.

### Is Windows 10 more secure?

While the call to move on to Windows 10 by Microsoft makes it sound mighty safe, what exactly are these security features that Windows 10 has over Windows 7? We know it'll be supported by Microsoft and therefore any known vulnerabilities will be patched. Its other security features are as follows:

- Windows 10 includes Windows Defender by default, which provides a baseline level of antivirus protection.
- SmartScreen is a reputation system that tries to block harmful and unknown file downloads.
- Windows 10 includes Microsoft Edge instead of Internet Explorer, which is targeted most often by exploits.





On the downside, you might argue that Windows 10 has a lot of new features that tend to come with new problems and risks, however, Windows 10 has been around for a while now, so the worst problems should have been tackled, however, we want to stress:

- Moving on to a new operating system, while safer than sticking with a legacy system, is no substitute for a strong security solution. Even Windows 10 machines need anti-malware protection.

According to a spokesperson from Microsoft's malware removal staff, the correlation between browser use and malware is actually higher than the one between OS version and malware. Meaning: The browser you use has a much bigger impact on the likelihood of being infected than the OS that you use, so even if you switch over to Windows 10 but keep using Google Chrome, you can still be easily infected. Now that Windows 10 has switched over to Edge, many cybercriminals are focusing on exploits for Google Chrome, one of the most popular browsers today.

### **Other operating systems.**

To avoid potential infection, or because they're looking for a change, some Windows users might consider moving to entirely different operating systems, such as Mac or Linux, but layering up built-in protection with security software is important, even if you decide to switch.

For example, the long-standing myth that Macs are safer than Windows systems has been proven wrong. As you can read in Malwarebyte's [2020 State of Malware Report](#), Mac threats increased exponentially in comparison to those against Windows PCs in 2019, with nearly double the threats per Mac endpoint than Windows. And while Macs don't get viruses, Mac adware is more sophisticated and dangerous than traditional Mac malware. In some cases, people may consider switching to a Chromebook, which is certainly a cheaper option if it offers enough capabilities to replace your current Windows desktop or laptop. But even Chromebooks can—and do—get infected.

A lot of users won't switch to a more hardcore Linux OS, because they expect a huge learning curve (another misconception) or think their favourite software would not be available (sometimes true, but not always). However, even if they did, Linux OSs are not free from malware, they're primarily attacked less often because cybercriminals understand their user base isn't large and is probably more knowledgeable about malware, so their payday isn't as big. The American NSA, keen to hack others but not keen on being hacked themselves, are thought to use Linux PCs 'hardened' with 'Mandatory Access Controls' and with competent antivirus software. It's surprisingly easy to set up something like that for home use.

### **Windows 7 user base**

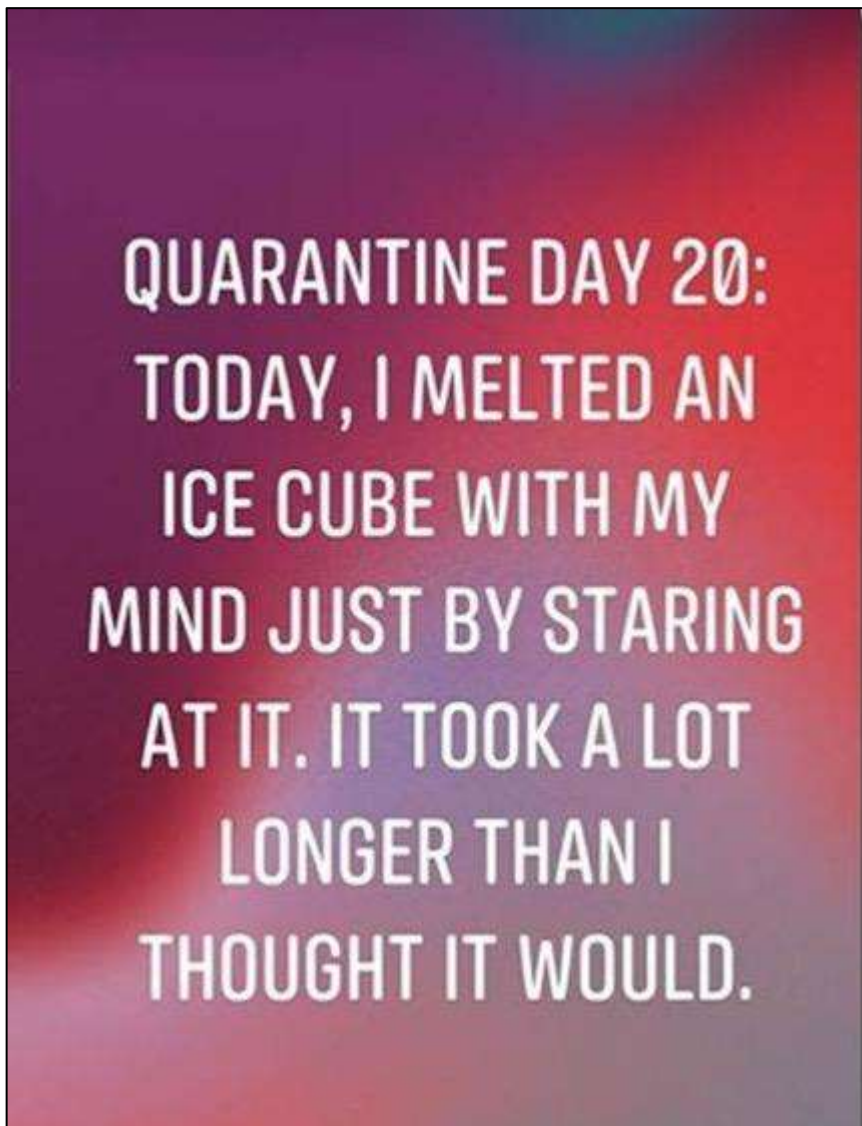
Currently over 23 percent of Windows users worldwide are still on Windows 7, and only 69 percent have already switched to Windows 10, the rest are using the less popular Windows 8 or versions of Windows that have gone EOL long before Windows 7. Oddly enough, the percentage of Windows 7 users has hardly decreased after reaching the EOL date in January (from roughly



24 percent to 23 percent) and with this huge amount of potentially unpatched systems still active in the market, any exploitable vulnerability will result in a widespread disaster.

Would [WannaCry](#) have had such an enormous impact if Windows XP and Windows Server 2003 had been abandoned before it spread? We will never know. What we do know that Windows 8 and 10 did not need to be patched for the vulnerability that was used to spread WannaCry. They were not contributing to the choir of systems trying to infect their neighbours. Emergency patches were released for several older Windows versions, including Windows 7. At the time, Windows 7 was still supported.

If you're still using Windows 7, it is strongly suggested you upgrade to Win 10 now. You can still do it for free, I wrote how to so do a while back, see [HERE](#)





## 35 Flying Instructor's Course. June 1966



**Standing L-R:** Keith Molloy, Dave Godfrey, Ron Tayles, Bob Richardson, Don McFarlane, Brian O'Shea.

**Seated L-R:** Bill Percy, Jim Lambley, Paul Evans, Bill Trewartha, Brian (Taffy) Salvage, Dave Rogers.







**Standing L-R:** Trevor Richardson, Tylor (didn't graduate), Errol Walker, Peter Yates, Nick Leray-Meyer.

**Seated L-R:** Mike Marsh, Bob Richardson, Dick Bryce, Pete Ring.

## WOD's Course, 1985.

Frank Oostenbroek sent us these pics, he says these blokes were on his WOD's course.



**Standing L-R:** Kev Edwards, Fred Holtman, Alan Giltrap.

**Seated L-R:** Bill Bolland, Chris Dunne, Noel Neilsen, Jeff Murray.





## A2-1019.

Being repaired after accident.



This Bell UH-1B Iroquois Helicopter was issued to 9 Squadron at Fairbairn in October 1964. In May 1966 it was flown from Fairbairn to Richmond and then transported via troopship HMAS Sydney to Vung Tau, arriving on 6 June 1966. It was used by 9 Squadron in operational duties and completed 489 operational missions and a far larger number of sorties or flights, including medical evacuations, troop transport, liaison and other duties. While on operations on 13 April 1967 the aircraft crash landed following an engine failure and was airlifted by a United States Army Chinook helicopter back to Vung Tau. On 22 September 1967 the aircraft returned to operations following extensive repairs which included the replacement of the tail-boom. It returned to Australia in October 1968 and was issued to 5 Squadron at Fairbairn.

From 1975-1979 the aircraft was used at Williamtown and later issued to No 2 Flying Training School at Pearce where it was used in Search and Rescue Operations. On 21 May 1985 it was flown by Mick Haxell DFC (right) to the Australian War Memorial and presented to the Memorial by Air Marshal Evans AC DSO AFC. This aircraft was stored at Fairbairn from 21 May 1985 until 18 May 1988 when it was transported to AWM Mitchell store. It is currently on display in the [Vietnam Gallery](#).







## Sale 1967.



**Standing L-R:** Dino Matto, Tony Flanagan, Rusty Draper, Don't know,  
**Kneeling L-r:** Harry Allie, Harry Warton.



Alan Scherini, Dino Matto and Tony Flanagan



Michael Wark, Wally Tersic, at Seaspray Beach, Sale.

Self-isolation is getting so bad I'm starting to get a crush on my roommate...  
and we've been married for more than 40 years.





## Kev Rosser sent us this!



Kev says "My father joined the RAN in 1938. I think this was sent to serving members 4 months after the start of WW2 on 1 Sep 1939"



## 4/86 Radtech Air Course.

(Can anyone help with the missing names?)



**Back Row L-R:** Michael Smale, Don't know, Don't know.

**Front Row L-R:** Don't know, John Dallimore (CO), Brett Lynch.

## 4/86 Radtech Ground Course.





One of the Telstars Vampires at Laverton.

## USAF U2 at Laverton, mid 1960s.



On 26 October 1960, three Lockheed U-2 of the USAF 4080th Strategic Reconnaissance Wing arrived at East Sale to commence Operation Crowflight VI as part of the U.S. Department of Defense **H**igh **A**ltitude **S**ampling **P**rogram (HASP). This was the first recorded presence of the U-2 in Australia but given the nature of this aeroplane's operations, there may have been earlier visits!





HASP operations began in 1957 from bases in Texas, Alaska, New Mexico, the Panama Canal zone and Argentina with the announced purpose of determining the worldwide distribution and concentration of radioactive debris from nuclear testing. More specifically, the classified purpose of Operation Crowflight was to gather samples of the Krypton-85 gas isotope which, it had been discovered by US scientists, could reveal the strength of Soviet nuclear detonations. These operations were flown at high altitude (60,000 feet and above) in a straight line aligned north-south-north from which the Crowflight name was derived i.e. as the crow flies! The extension of operations to Australia was signalled by a visit from the US Ambassador to Prime Minister Menzies on 5th July 1960. This was just two months after the infamous downing of Francis Gary Powers' U-2 (56-6693) in Soviet airspace on 1st May 1960.

The Crowflight U-2 operations were usually accompanied by four Martin NB-57B (Canberras). Operations were typically supported by two SC-54D (DC-4s) for SAR duties and several C-124 Globemaster II for logistics support. Crowflight IX commenced on 1st March 1962 and on 8th May it was announced that Australian operations would continue on a semi-permanent basis. The last two U-2s departed Laverton for the USA on 28th February 1965 as they were required for redeployment in S.E. Asia. These U-2s were replaced by two RB-57F (modified Canberras) which arrived on 1st March 1965. USAF Crowflight operations in Australia came to a close in February 1966.

#### Operation HICAT



On 14th July 1966, U2 (66722) arrived at Laverton for Operation HICAT, a USAF program to study **H**igh altitude **C**lear **A**ir **T**urbulence. These operations commenced on 19th July 1966 and continued until 11th August when the final sortie (to Brisbane and return) was flown. During its time at Laverton, 56-6722 acquired RAAF roundels on both sides of the fin although the roundel on the port side was facing aft. The aircraft departed Laverton on 13th August 1966 on return to California. This aircraft is now an exhibit at the National Museum of the USAF at Dayton, Ohio.

Mrs O'Toole said: "I can only tell you this bit of scandal once, because I promised Mrs O'Leary I would never repeat it"





**Ken Smith – Cinema Operator.** (RAAF News, a long time ago)



“On the 17<sup>th</sup> July 1972, the Adastra Cinema at Laverton was closed and demolished to make way for the new Airmen’s Mess. With some modifications to the old gymnasium and the transfer of the Cinemeccanica 35-70mm projection and sound equipment, the Adastra Cinema re-opened on the 29<sup>th</sup> August 1972. with 115 fewer seats and reduced screen size. Until two years ago nothing had changed, however Christmas 1980 saw a new ticket office replace the “hole in the wall” ticket office. At Easter 1981 a new foyer and candy bar “happened”. In the projection room things had been happening also, a new Dolby Stereo optical Sound system had been installed. Ken has used a lot of his own time to accomplish the changes seen at the cinema over the last few years.

The biggest change at the Adastra however, will be the departure of the Cinema operator CPL. Ken Smith, when he leaves the Air Force in early November. Ken has been a CINOP with the RAAF for the last 17 years. He has also served at Darwin, Point Cook, Pearce, Edinburgh,



Richmond and even Ubon in Thailand. Before he joined, he was a projectionist at a Theatre in Sydney.

So far, Ken has been showing films for 27 years and is a member of the Australian Cinema Pioneers. (Membership is open to 25 year veterans of the cinema industry). Ken's favourite part-time is - you guessed it - making 16mm films. Ken is now off to Darwin to manage the Paspalis Drive-In.

All the best to you Ken, in your future, and, from all your friends in the RAAF, thank you for your years of dedicated service."

## A2-1019

Iroquois helicopter machine gunners from 9 Squadron check their weapons after a mission in support of Australian troops in the rubber plantations near the 1st Australian Task Force (1ATF) Headquarters, near Vung Tau.

During a reconnaissance run (Feb 1967) over the Long Tan area, the RAAF spotted three Viet Cong moving through the rubber trees. They swept into the attack and the three VC guerrillas were believed killed.

Draped in machine gun 7.62mm ammunition belts, the crewmen are Brian Taylor, (left) and Brian (Ron) Hill.

The aircraft they are in is Iroquois A2-1019 which is now part of the Australian War Memorial's collection.

AWM Photo.





Gerry Mapstone – Gerry was an Airfield Defence Guard and did two tours of Vietnam, one from June 1967 to June 1968, then again from May 1970 to Sept 1970. This photo taken in March 1968.







## Rex Budd



Two records were established by Flt Lt Rex Robert Budd, an Iroquois helicopter pilot with No 9 Squadron. He was the first RAAF helicopter pilot to return to South Vietnam for a second tour and he was the first RAAF helicopter pilot to log 1,000 flying hours in the war zone. Rex served for 10 years in the RAAF and accumulated a total of 1,450 hours on helicopters. He was awarded the Distinguished Flying Cross (DFC) for his services to the RAAF on 22 May 1970.

Rex died of cancer on the 5<sup>th</sup> November, 2006.

AWM



Peter Davidson, 9 Sqn. Pete served with 9 Sqn in Vung Tau from Feb 1967 to March 1968.

Sadly, Peter passed away on the 8<sup>th</sup> November, 2018, succumbing to Cancer. He was 72.



## Jean Sheppard – Miss NSW Charity Queen 1972.





Jean Sheppard, a WRAAF from Williamtown, was crowned Miss NSW Charity Queen in 1971 at the Sydney Town Hall. She is being congratulated by Air Commodore Arthur Mather, OC Williamtown and Flight Officer Margaret Cass, OIC WRAAF, Williamtown.

## WRAAF's Coral Lounge. Amberley.

(About 1968?)



**L-R:** Christine Wright, Roberta Zuccelli, Heather Diprose, Nola Smith and Pat Hodda.

The girls were in the recently opened Coral Lounge at Amberley. We don't have any info on the Coral Lounge, if anyone can give us the when, where and why we'd appreciate it.

If you're sitting in public and a stranger takes the seat next to you,  
just stare straight ahead and say "Did you bring the money?"





L-R: Sophia Kahl, Ron Levenger (Secretary RAAFA NSW), Vicki Eastwood – about 1954?

### WRAAF Dining-in night, East Sale. (Sorry, no date – help?)



L-R: Margaret Goodland, Jan frazer, Lorraine Clark, Ruth Dennison, Kathy Bennet, Sue Thornton, Sqn Off Parslow, Sect Off Meredith, Wg Off Pittman, Marjorie Jones, Mary Rossen, Kathy Murphy, Rhonda (Tex) Williamson, Lyn Sager, Doris Anderson.



## East Sale WRAAFs, 1970



## Slumming it at Coolangatta, 2015.



Pat Hodda, Missy Vanroon.





Robert Mathers, Jock ?, Steve Beckwith, John van der Linden at the Laverton Golf Club 1985.

## Sabre fixers – Williamtown.







### More Sabre fixers.



### Vampire that needs fixing – East Sale.







Slight nose wheel problem.

## Sabres at Williamtown that don't need fixing. 1956.



[Click the pic to watch a video of the Sabre flying at Amberley.](#)



**WRAAFs at East Sale 1950s** (Looks cold)



**Paul Standing with the 35 Sqn chopper at the Highrange training area.**







## The right horrible Jimmy Potter.

Soaking up a bit of sun in Scotland.



When you do squats, are your knees supposed to sound like a goat chewing on an aluminium can stuffed with celery?





## Kevin Coman, inside a B17 (Somewhere, sometime)



Sometimes, someone unexpected comes into your life outta nowhere,  
makes your heart race and changes you forever.  
We call these people cops.



## Box packers – 1SD



## Ozzie Rules team, East Sale, 1970s.







## Dodgers softball team. (1978?)



**Back row L-R:** Don't know, Ian Gartner, Don't know, Don't know, Don't know, Don't know.  
**Front row L-R:** Stu Langdon, Peter Foley, John Hurren, Don't know, Ian Brophy.





## 23 Navigators Course.

June 1961 to June 1962



**Back row L-R:** Jim Hanigan, 'Red' Jordan, 'Tex' McLaughlin, Tony Wilkinson, John 'Wang' Miller, Terry Nugent.

**Front row L-R:** 'Paddy' O'Farrell, Mike McMahon, John Sandys, Mike Banfield RAF (Course Mother SAN Staff), Mel Rowbotham, Neil Bowers, Wally Patterson.

# THE RAM

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



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Page 6

**Kedron-Wavell**  
SERVICES CLUB

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Welcome to Kedron-Wavell Services Club. Located in the vibrant Chermiside precinct, only 15 minutes north of Brisbane's CBD, the Club is Brisbane's award winning, premier function, entertainment and leisure destination

With a cosmopolitan atmosphere and elegant features, Kedron-Wavell Services Club is the perfect place to meet your family and friends... or meet new friends! We're easy to find and offer free off-street parking for members and guests.

Unfortunately the Club is closed following a directive from Government - "but we'll be back"!!

## Women's toilets.



When women have to visit a public toilet, they usually find a line of women waiting at the entrance, so they smile politely and take their place. Once in and it's your turn, you check for feet under the cubicle doors.

Every cubicle is occupied.





Finally, a door opens and you dash in, nearly knocking down the woman leaving the cubicle. You get in to find the door won't latch. It doesn't matter, the wait has been so long you are about to wet your pants! The dispenser for the modern 'seat covers' (invented by someone's Mum, no doubt) is handy, but empty. You would hang your bag on the door hook, if there was one, so you carefully, but quickly drape it around your neck, (Mum would turn over in her grave if you put it on the FLOOR!), down with your pants and assume 'The Stance'.



In this position, your aging, toneless, thigh muscles begin to shake. You'd love to sit down, but having not taken time to wipe the seat or to lay toilet paper on it, you hold 'The Stance.' To take your mind off your trembling thighs, you reach for what you discover to be the empty toilet paper dispenser. In your mind, you can hear your mother's voice saying, 'Dear, if you had tried to clean the seat, you would have KNOWN there was no toilet paper!' Your thighs shake more.

You remember the tiny tissue that you blew your nose on yesterday, the one that's still in your bag (the bag around your neck, that now you have to hold up trying not to strangle yourself at the same time). That would have to do, so you crumple it in the puffiest way possible. It's still smaller than your thumbnail.

Someone pushes your door open because the latch doesn't work.



The door hits your bag, which is hanging around your neck in front of your chest and you and your bag topple backward against the tank of the toilet. 'Occupied!' you scream, as you reach for the door, dropping your precious, tiny, crumpled tissue in a puddle on the floor, while losing your footing altogether and sliding down directly onto the TOILET SEAT. It is wet of course. You bolt up, knowing all too well that it's too late. Your bare bottom has made contact with every imaginable germ and life form on the uncovered seat because YOU never laid down toilet paper, not that there was any, even if you had taken time to try.

You know that your mother would be utterly appalled if she knew, because you're certain her bare bottom never touched a public toilet seat because, frankly, dear, 'You just don't know what kind of diseases you could get.'



By this time, the automatic sensor on the back of the toilet is so confused that it flushes, propelling a stream of water like a fire hose against the inside of the bowl and spraying a fine mist of water that covers your butt and runs down your legs and into your shoes. The flush sucks everything down with such force that you grab onto the empty toilet paper dispenser for fear of being dragged in too. At this point, you give up. You're soaked by the spewing water and the wet toilet seat. You're exhausted. You try to wipe with a candy wrapper you found in your pocket and then slink out inconspicuously to the sinks.

You can't figure out how to operate the taps with the automatic sensors, so you wipe your hands with spit and a dry paper towel and walk past the line of women still waiting. You are no longer able to smile politely to them. A kind soul at the very end of the line points out a piece of toilet paper trailing from your shoe. (Where was that when you NEEDED it?) You yank the paper from your shoe, plonk it in the woman's hand and tell her warmly, 'Here, you just might need this.'

As you exit, you spot your hubby, who has long since entered, used and left the men's toilet. Annoyed, he asks, 'What took you so long and why is your bag hanging around your neck?'





This is dedicated to women everywhere who deal with any public toilets. It finally explains to the men what really does take us so long. It also answers that other commonly asked question about why women go to the toilets in pairs. It's so the other girl can hold the door, hang onto your bag and hand you Kleenex under the door.

A friend is like a good bra... Hard to find, Supportive, Comfortable, Always lifts you up, Never lets you down or leaves you hanging. And is always close to your heart!!!

I think there's a fair bit of truth in [THIS](#).

## Luffa

The natural sponge-looking "luffa" scrubbers you can buy in the beauty departments of shops are the fibrous skeleton of a fully ripened Egyptian fruit (*Luffa aegyptiaca*) that is lighter coloured than, but roughly the size and shape of a cucumber.



## What's the difference between ink-jet and toner printers?

howstuffworks<sup>2</sup>

They both get your digital files onto paper, but the actual mechanics of printing with toner versus ink are vastly different.

Contemporary printing technology is faster and cheaper than ever before, but it's not always immediately obvious which type of printer is best for specific jobs. Make the wrong choice, and you could blow hundreds of extra dollars per year on printer consumables, namely ink or toner.

Ink is used in inkjet printers. It's a liquid tinted with pigments or dyes. Toner, on the







other hand, is a fine powder that's used in laser printers. Both inkjet and laser printers are used for home and commercial printing purposes, such as creating prints taken with your digital camera or zipping through dozens of pages of text. But the way they apply material to a piece of paper is very different.

Inkjet printers squirt tiny droplets of ink through equally tiny nozzles and onto paper. You can sort of imagine the nozzles as tiny water hoses, all turning on and off thousands of times per second. Sophisticated printer software controls all of the nozzles, shooting ink in precise patterns that make up perhaps a picture of your cat lounging on your keyboard.

There are two primary categories of inkjet ink: dye-based or pigment-based. Dye-based inks consist of colourants that are dissolved in a liquid. Pigmented inks, on the other hand, use ultra-fine powder that's suspended in liquid. If you want to know exactly what's in these inks, good luck to you. Inkjet cartridges are a huge revenue generator for printer companies, and they carefully guard their formulas.

Laser printing technology isn't quite as straightforward. That's because toner doesn't adhere to paper the way that a liquid-based ink does. Toner is made up mostly of finely ground polyester, which is a type of plastic. Like your slacks sticking to your legs, polyester powder can hold a static charge that grabs onto anything with an opposite charge. In these printers, a laser creates an electrostatic template of your desired images on a rotating metal drum, which has an electrical charge. A cartridge dispenses toner onto the drum, but the toner sticks only to certain places, such as the outline of your kitty's soft belly, where the laser alters the drum's electrical charge.

Fittingly, the printer also charges the sheets of paper as they pass through the machine. As the sheet curls past the drum, it pulls off the charged toner in exact shapes that make up text and images. Then a hot fuser basically melts the polyester in place, making sharp, smudge-free



One drawback of toner, that powder can really make a mess. Inkjet printers require ink cartridges, usually one each for cyan, magenta, yellow and black. You can replace individual cartridges as the colours are depleted. Some laser printers, particularly inexpensive models, print only in black. Once the black toner cartridge runs out, you install a new one. Pricier laser units do print in colour and require separate toner cartridges for various hues.

At the consumer level, inkjet printers tend to be the most common technology. That's because the printers themselves are inexpensive, starting at less than \$50. Yet by the page, ink costs may surprise you. Depending on whether you print mostly text or you throw in a lot of pictures, too, an inkjet's cost-per-page may be \$0.05 ... or as much as \$0.75. The cheapest laser printers cost more than \$100 and print only in monochrome. Colour laser printers cost (at least) twice as much as their monochrome cousins, and in some cases their toner may ultimately be even more expensive than inkjet ink.



It's worth remembering that although toner is always initially more expensive than ink, the cartridges last longer than ink. If you stick with printing mostly text, you can't beat the per-page cost of a laser printer. If you install a higher-capacity cartridge, the price can drop dramatically, to just a couple of cents or less per page.

Volume may dictate the cost-effectiveness of your choice in printer. If you print only a few hundred pages per year, an inkjet is fine. If you print thousands of pages, though, a laser printer will save you serious money in the long run. In addition, the type of jobs you print will determine which type of printer is best suited to your needs. If you need an all-around printer that creates images, graphics and text, an inkjet will be a solid investment. They produce fairly good text quality, and photo-specific models often trump laser printer quality, with deep, rich hues on glossy photo paper. If you print primarily text, a laser printer is a better choice. These versions crank out pages at 20 pages per minute or faster (which is two to three times as fast as many inkjets) and the text quality is crisper and more precise than any inkjet.

Whether you want an ink or toner-based printer, be sure to research customer reviews on every model you consider. You'll wind up with the kind of printer you need without breaking your technology budget.

## What Is “Military-Grade Encryption”?

**How-To Geek**

Many companies tout “military-grade encryption” to protect your data. If it's good enough for the military, it must be the best—right? Well, kind of. “Military-grade encryption” is more of a marketing term that doesn't have a precise meaning.



Encryption is, essentially, a way to take information and scramble it, so it looks like gibberish. You can then decrypt that encrypted information, but only if you know how. The method of encrypting and decrypting is known as a “cipher,” and it usually relies on a piece of information known as a “key.”



For example, when you visit a website encrypted with HTTPS (like the Radschool site) and sign in with a password or provide a credit card number, that private data is sent over the internet in a scrambled (encrypted) form. Only your computer and the website you're communicating with can understand it, which prevents people from snooping on your password or credit card number. When you first connect, your browser and the website perform a "handshake" and exchange secrets that are used for encryption and decryption of the data.

There are many different encryption algorithms. Some are more secure and harder to crack than others.

### Rebranding standard encryption

Whether you're logging into your online banking, using a virtual private network (VPN), encrypting the files on your hard drive, or storing your passwords in a secure vault, you obviously want stronger encryption that's harder to crack. To put you at ease and generally sound as secure as possible, many services tout "military-grade encryption" on their websites and in advertisements. It sounds strong and battle-tested, but the military doesn't actually define something called "military-grade encryption." That's a phrase dreamt up by marketing people. By advertising encryption as "military-grade," companies are just saying that "the military uses it for some things." Bank-Level Encryption is the same thing and is another term that's thrown around a lot in marketing.



There are two main types of encryption, AES-256 and AES-128, the AES stands for Advanced Encryption System. It works like this: You type up a message to send over the internet then when you hit the enter button, if you're sending it to a HTTPS site, the message is scrambled into random characters which are practically impossible to unravel. Most web browsers now use AES-256. But – so that the receiving computer can make sense of what you've sent, your computer also sends a "key" to the receiving computer which "tells" the receiving computer how to unravel it. Without the key, it's just gibberish. AES-256's key has 256 characters while AES-128 has 128 characters, and even though AES-256 has twice as many characters as AES-128, the difference is really moot in a practical sense. Even using a supercomputer, a "brute force" attack would take one billion years to crack AES 128-bit encryption.

### Encryption as Munitions.

Cryptography has been an important part of warfare for a long time. It's a way a military can securely transmit messages without its enemies intercepting the messages. Even if the enemy intercepts the message, it must decrypt the message, so it's actually useful. The ancient Romans were using ciphers to disguise messages two thousand years ago under Julius Caesar. In World War II, Nazi Germany employed the Enigma machine to encode its messages. This was famously





cracked by Britain and its allies, who used the information gleaned from those encrypted messages to help win the war.



It should be no surprise, then, that many governments have regulated cryptography—specifically, its export to other countries. Up until 1992, cryptography was on the U.S. Munitions List as an “Auxiliary Military Equipment.” You could create and possess encryption technologies within the USA but not export them to other countries. The Netscape web browser once had two different versions: A domestic US edition with 128-bit encryption and an “international” version with 40-bit encryption (the maximum allowed.) Regulations were modified in the mid 90s to make it easier to export of encryption technologies from the US.

When one door closes and another door opens – you are probably in prison.

## Some Quick Steps to increase PC Performance.

**How-To Geek**

We live in the future. Your living room speaker turns on the coffee pot, a robot vacuums the house or mows the lawn and the thermostat knows when you get home, but even in this amazing era of automation, your PC still needs some manual help when it slows down.



### Check your startup programs.

When a computer is slow to boot up, a common ailment is having too many startup programs. To fix this in Windows 10, press the Windows key, and then type (and select) Task Manager. When the Task Manager opens, click the “Startup” tab. Here, you’ll see all the programs that are set to turn on when Windows boots up. Take a look at the column on the far right labelled Startup Impact. Examine anything rated as having a “high” or “medium” impact and decide whether it’s really important.

Name	Publisher	Status	Startup impact
1Password for Windows des...	AgileBits Inc.	Enabled	High
Desktop-Bridge.exe		Disabled	None
Nextcloud	Nextcloud GmbH	Enabled	High
NordVPN	NordVPN	Disabled	None
Plex Media Server	Plex, Inc.	Disabled	None
Razer Synapse 3	Razer Inc.	Enabled	High
Realtek HD Audio Universal ...	Realtek Semiconductor	Enabled	Low
Uplay launcher	Ubisoft	Disabled	None
Windows Security notificati...	Microsoft Corporation	Enabled	Medium

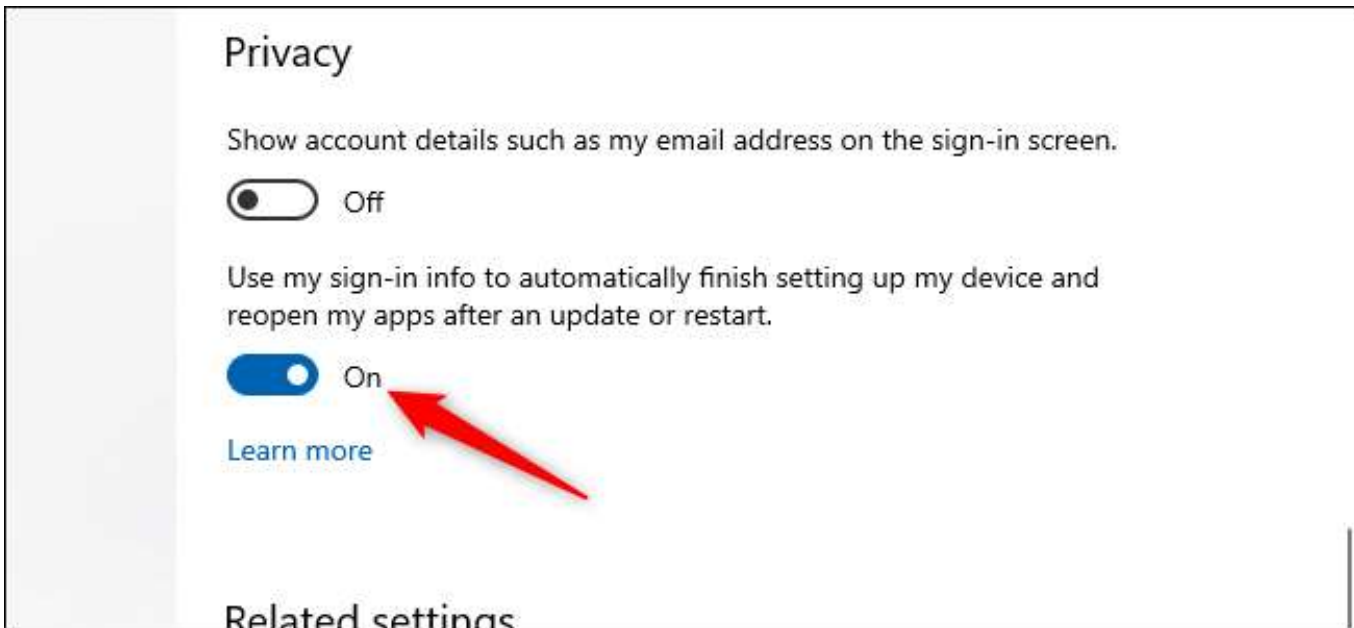
Do you really need Steam.exe to start up when you sign into your PC, for example? If all you do on this PC is game, then the answer might be yes. If it’s a multi-purpose PC, the answer is almost definitely “no.” You don’t want to turn off anything that’s mission-critical, even it does have a “high” impact, but take a good look at everything.

Once you’ve decided what will be turned off, select them one at a time with your mouse and click Disable in the lower right corner.

### Adjust your restart settings.

When your computer restarts automatically because of a system or program update, by default Windows 10 tries to reopen everything that was open on the desktop before the shutdown. It’s a nice feature, but it can also impact performance, and turning it off is easy.

Open the Settings app (click “Start” and then select the settings cog) in the lower left of the Start Menu. Inside the Settings app, select Accounts > Sign-In Options. Then under Privacy turn off the slider labelled “Use My Sign-In Info To Automatically Finish Setting Up My Device And Reopen My Apps After An Update Or Restart.”



### Remove bloatware and superfluous apps

Startup apps are just half the problem. Some programs have little helper utilities that run in the background even when an app isn't running. You don't want to turn these off manually unless you're familiar with what they're doing. A better approach is to just unload the apps that you never or rarely use, including bloatware applications that came preinstalled on your PC. Bloatware is the "free" trial programs that come installed on your machine, programs such as McAfee anti-virus are examples of bloatware.

Right-click on any superfluous Windows 10 Store apps in the Start menu and select "Uninstall." This works for regular desktop apps as well, but we still recommend [the old school Control Panel](#) method for removing those.

### Check your storage space

Windows 10 provides more built-in information for viewing and managing your PC's storage. To find it, open the Settings app again and select System > Storage. This section shows a summary of your usage of the system's primary storage, including how much space apps and features are using, as well as your large files and folders, temporary files, and so on. Typically, the storage usage should have a blue bar indicating how close to full it is. When the bar turns red, you have a problem and need to start unloading files to other drives (or delete them).

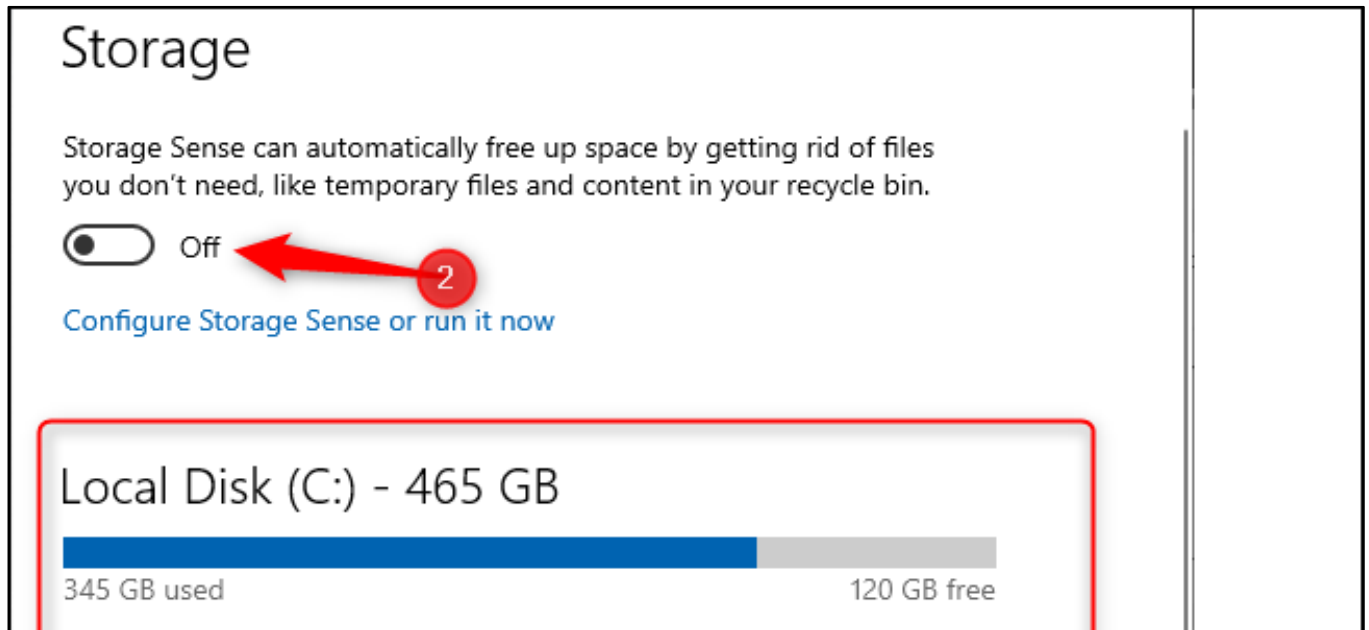
Using this feature can help you figure out what to delete (or unload), but be careful - there are a few things you don't want to touch. First, even if you see a ton of them in the "Apps & features" section, do not uninstall any of the Microsoft Visual C++ redistributables. It looks redundant, but different programs depend on different versions.

Also, if you see anything in the "Other" section any folders labelled AMD, Nvidia, or Intel should be left alone. You also don't want to touch the System & Reserved section.





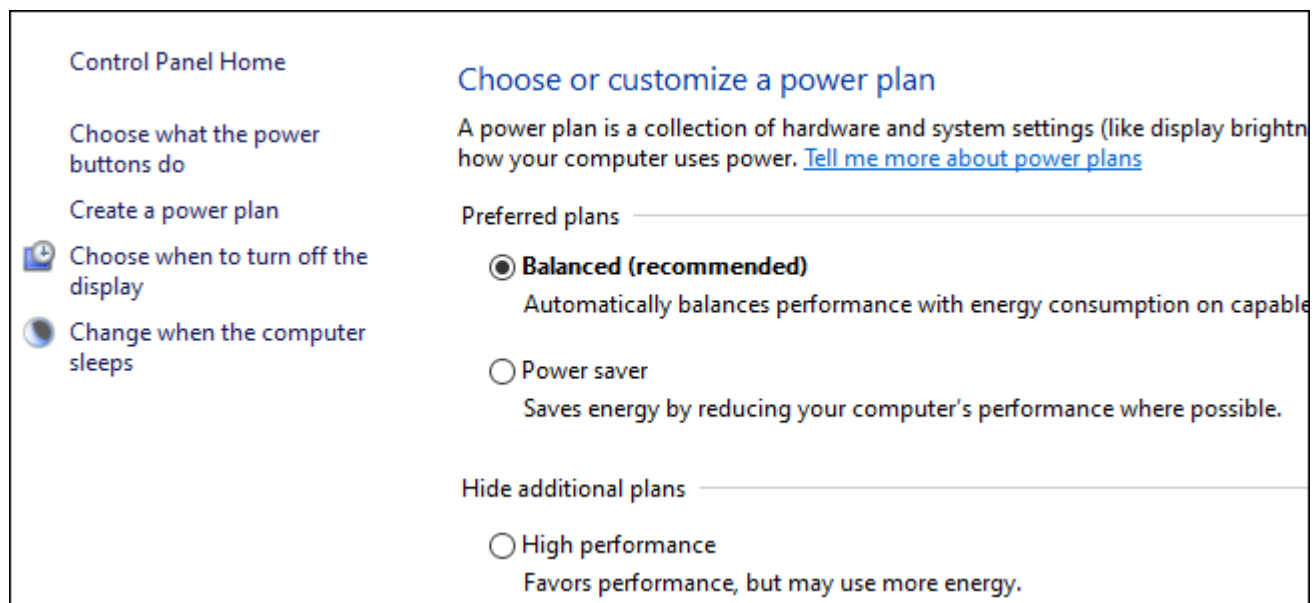
In general, if you don't know what something does, then don't uninstall or delete it.



In this section, you can also activate a feature called Storage Sense, which automatically deletes temporary files and other junk when it's not needed.

### Tweak the power plan

By default, Windows 10 uses a “balanced” power usage plan that can sometimes hamper performance. The balanced plan keeps your CPU speed lower when it's not in use and puts key components in their respective power-saving modes during times of low demand.





You can ratchet things up by opening the Control Panel (click “Start” and type “Control Panel”) and select “Power Options.” On the next panel, click “Show Additional Plans” and then select the “High Performance” option.

### Speed up menus and animations.

Like other versions of the operating system, Windows 10 uses visual effects that can reduce performance. These are items such as [animations](#), window translucency, shadow effects, and so on.



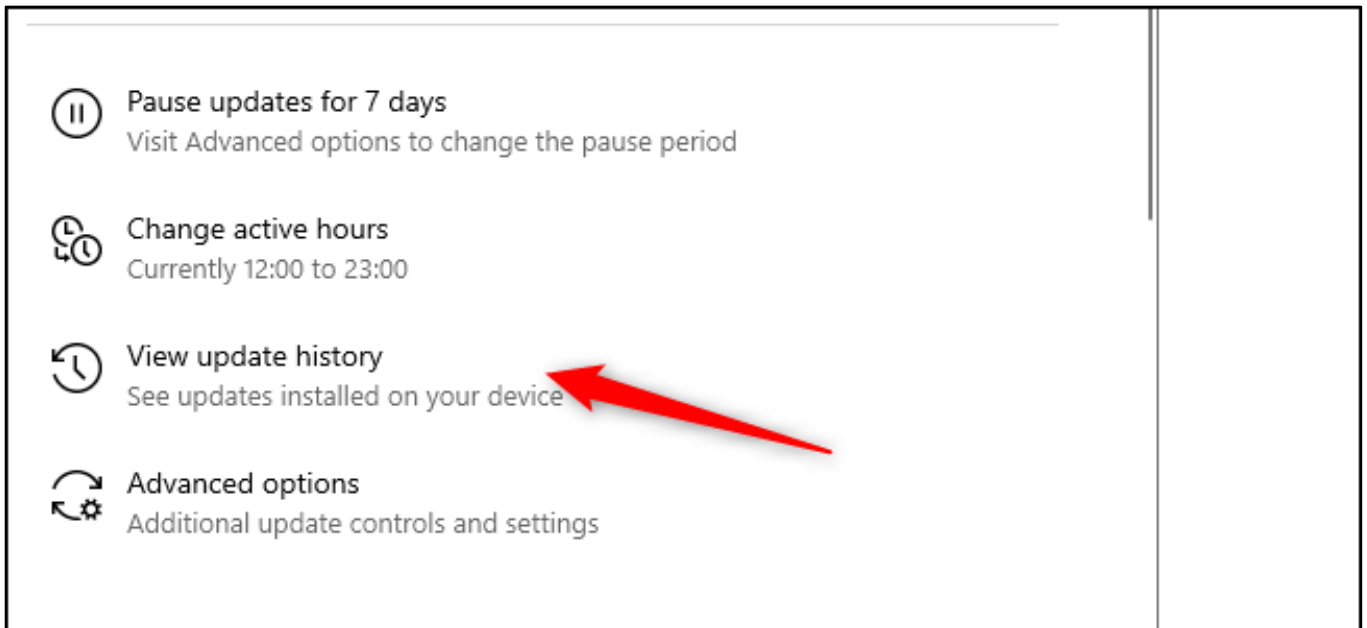
To open this search for “Performance” down the bottom left of the taskbar, and then select “Adjust The Appearance and Performance of Windows.” By default, Windows 10 tries to pick the settings that are best for your PC, but you can also select the option that says “Adjust For Best Performance,” then click “Apply.” Another alternative is to go through the list manually and uncheck what you don’t want to use. This change probably won’t do much on mid-range and high-end machines, but budget devices with limited ram and weaker CPUs can benefit.

### Recovering from a sudden slow down.

If your PC is suddenly slowing down, there are two culprits to look at right away. First, open the Settings > Update & Security > View Update History. Were any updates installed around the time your PC started slowing down? If so, search online by the update’s KB number (it’s in brackets at the end of each update title), and see if anyone else is complaining about it on PC news sites, forums, or Reddit posts.



If a good amount of people are having trouble since that update, then you may need to [uninstall it](#) or wait for Microsoft to send a fix—that could take a while.



Next, run a standard scan for malware, and then [do an offline scan with Windows Defender](#) to make extra sure that everything is fine.

### Hard drive tips

This last tip doesn't affect PCs with solid-state drives but it's good advice for those with hard drives. Spinning drives can do with a little extra maintenance from time to time. These are good old fashioned moves that longtime PC users should be familiar with.

First, use the Defragment and Optimize Drives utility. Search for it in the taskbar and it will pop up. Select the drives you want to deal with, and then select the "Optimize" button. You can also turn on automated optimization. Windows defragments and optimizes your drives automatically, but it's a good idea to check and run it manually if your PC is slow.

Next, is the disk cleanup utility—again, search for "Disk Cleanup" from the taskbar or Start menu's search box. Choose the drive you want to clean up and run it.

If these steps don't show enough of a boost in performance, then it might be time to look at upgrading your PC hardware. Switching to an SSD or an M.2 drive offers the most noticeable improvement, while installing more RAM if your PC has 8GB or less is also a good idea.

The journey of a thousand miles begins with a broken fan belt and a flat tyre.





## Rising Rock: Earth's Crust has its own tides, too

howstuffworks

If you earn your living on the ocean, you'd better know how to read a tide table. Around the world, most coastal communities witness sea level rise and fall multiple times every day. The effect can be quite dramatic: On certain days, there's a 53-foot (16-meter) difference between the low and high tides in Canada's [Minas Basin Inlet](#). Working fishermen, divers and ship captains must take fluctuations like these into account. For this reason, governments release tables that predict the heights of future tides for different corners of the oceans.

Yet unbeknownst to many of us, the ground beneath our feet experiences tides of its own. The phenomenon goes by many names, including "land tides," "crustal tides," "Earth tides," and "solid Earth tides." No matter what you call the process, it's caused by the same forces that generate our better-known oceanic tides.



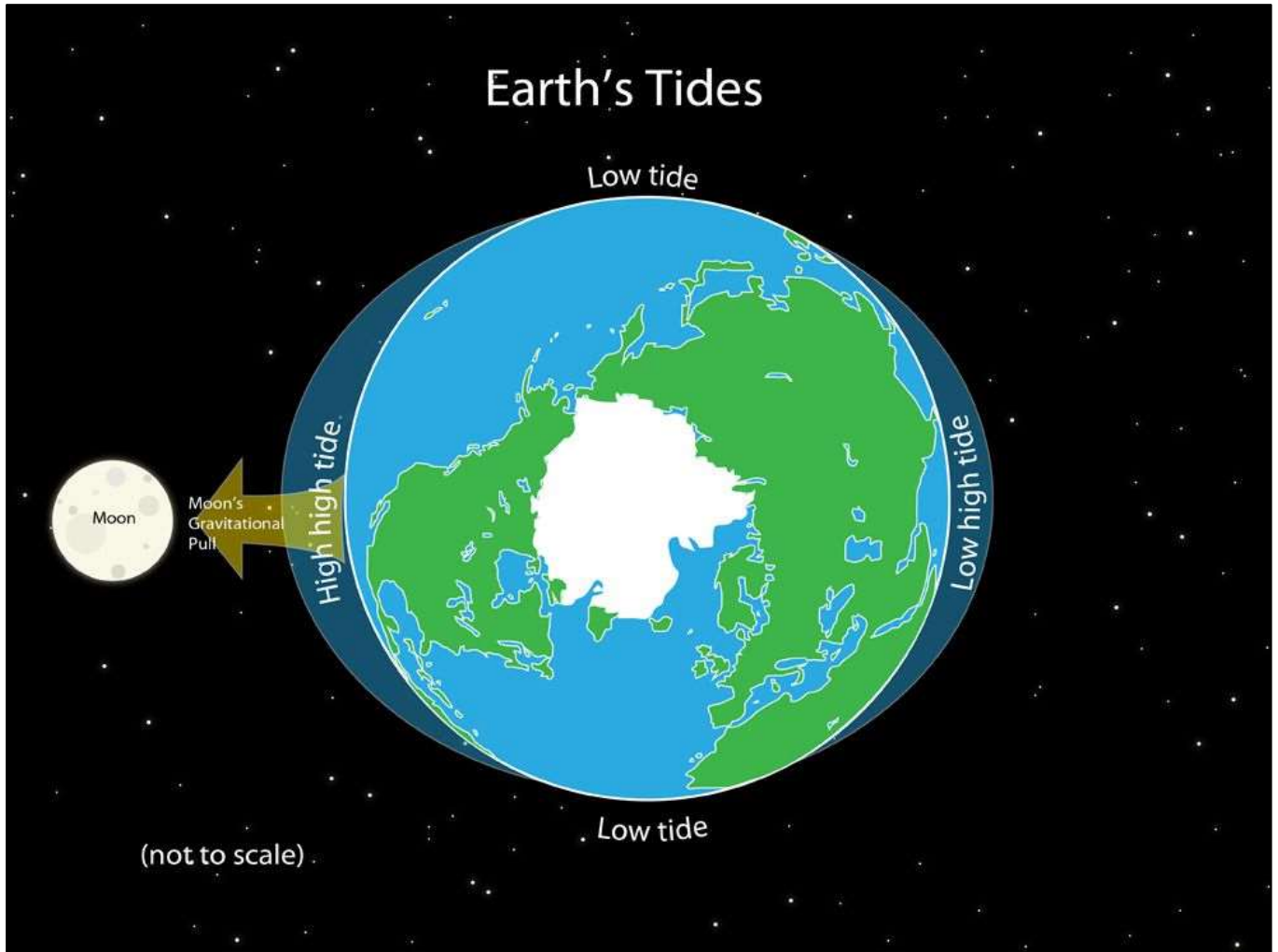
The number of deep earthquakes that rumble near the San Andreas Fault increases just before Earth enters a tidal cycle.

### Our elastic planet

Tides are complicated beasts; they're the net result of several different factors all working together. The most significant contributing forces are the gravitational pulls that the sun, the moon and the earth exert on one other. The sun actually has less influence over our tides than the moon does despite being 22 million times larger. That's because the moon is so much closer to planet Earth. As such, on the surface of Earth, the moon's gravitational force is about 2.2 times stronger than the sun's.



High ocean tides, at least in most parts of the world, happen twice a day. We experience one when the moon is overhead and, counterintuitive as this may sound, a second high tide takes place when the moon is on the opposite side of Earth. Low ocean tides occur during the periods between those points. (The centrifugal force of our rotating planet helps account for the strange arrangement.)



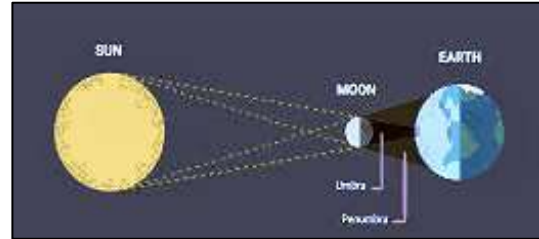
While this is happening, a similar cycle unfolds within the very crust of our planet. To a miniscule degree, the ground level itself rises and falls every day in accordance with the moon's whereabouts. The motion extends through the whole of the solid earth, not just the crust, but is largest at the surface. The earth is slightly elastic. Your naked eye is all that's required to watch the ocean tide come in and go out, however, it's straight-up impossible to observe solid Earth tides without using scientific instruments. At high tide, New York City can rise upward by 14 inches (35.5 centimetres). The Big Apple then falls by the same degree at low tide. A pedestrian standing in Times Square or the Bronx Zoo wouldn't notice any of this because all the buildings, trees, streets and people in the five boroughs rise and fall in concert.

The "vertical motion at the surface" varies from place to place; some areas bulge and descend less dramatically than New York does. Other locales outperform the big city on that score.



### The fortnightly cycle.

As well as recognising how the moon affects both solid Earth and oceanic tides, the sun should not be ignored. Those who live in coastal areas are well aware of how solar activity can affect the strength of oceanic tides. When the sun aligns with the moon, the sea's high tides get higher and the low tides get lower. The exact opposite happens when those two celestial bodies are situated at right angles to one another, meaning the planet ends up with low "high" tides and high "low" tides.



That cycle repeats itself every two weeks and is therefore known as the "fortnightly cycle." On top of giving boaters headaches, it also affects solid Earth tides. When the earth's crust flexes in the direction of the tidal pull, this puts a stress on any tectonic faults that cut through the rock. If the combination of the tidal stress and the pre-existing tectonic stress is just right, this can set off an earthquake. The rate of low-frequency 'quakes increases right before the fortnightly cycle enters its solar/lunar alignment stage though Californians shouldn't lose too much sleep over it. The earthquakes in question are too weak and occur too far below the planet's surface to cause any serious damage on the surface.

Crustal tides are generally far too small to matter for most faults, nonetheless, the geologist has found that it's possible to observe a small but measurable influence in some locations, particularly in places like mid-ocean ridges. There are also special regions of the earth's crust where faults appear to be astoundingly weak, these regions tend to be deep at the roots of subduction zone faults, like the faults that dive beneath Japan and the U.S. Pacific northwest. Down there, some 12 to 18 miles (20 to 30 kilometres) beneath the planet's surface, faults create small-scale seismic tremors. The tides can have a very substantial effect on [tremors], with tremor rates oscillating by up to 30 percent in phase with the tides, however, these tiny pseudo-earthquakes are totally undetectable by people and do not pose any hazard.

Still, knowledge is knowledge.

Don't aspire to be irreplaceable, if you can't be replaced you can't be promoted.

### Dry July.

I'm raising money for the McGrath Foundation who were a great help to my lovely daughter, Fiona, when she was battling breast cancer. Fiona passed away in Jan 2019 so this is a legacy to her memory.





*Dry July* is a fundraiser that encourages you to go alcohol-free in July to raise funds for people affected by cancer. The funds raised as part of *Dry July* will provide invaluable services for cancer patients, their families and carers – whether it's a lift to a life-saving appointment, guidance from a specialist nurse, connection to an informative voice, access to therapy programs or a bed close to treatment. Having a month off alcohol also has [great health benefits](#), such as sleeping better, having more energy and of course, no hangovers! So you're not only helping others, you're helping yourself. It's a win-win!

The aim to make a difficult time, a little easier for those affected by cancer.



In July 2008, three mates, Brett, Kenny and Phil, wanted to take a break from alcohol, so decided to abstain for the month of July, coining it their '*Dry July*'. They also wanted to raise money for a cause very close to their hearts, so they asked friends and family to sponsor them. Hoping to raise \$3,000 to buy a TV for their local hospital's waiting room, the campaign was a huge success. The first *Dry July* ended up raising \$250,000, thanks to the support of Adam Spencer, and *Dry July* was well and truly born!

If you can spare a few Oxford Scholars I would very much appreciate it.

Please click here <http://www.dryjuly.com/users/ted-mcevoy-2>



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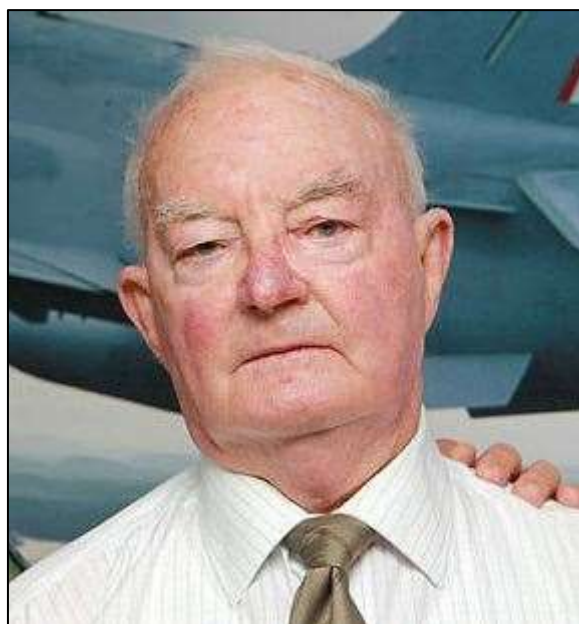
## My Story

### **JIM (J the T) TREADWELL. AFC, OAM.**

(Moth Eaten Old Fart?)

I was inducted into the RAAF on 1 October 1951 as a member of No 8 Flight Training (FTS) Course with the rank of Trainee Signaller. The initial phase of the Course was held at Point Cook and at the time, Aircrew Training Courses were of 18 month duration. Six months "Initial Training" consisting of drill, Air force Law, administration, and a number of other equally, nasty, subjects, followed by six months Basic Training, when trainees first became airborne and six months Applied Training, to round off the torture.

At the beginning of 1952, after 3 months "Initial Training" at Point Cook and because I had been selected as a Trainee Signaller, I went off to the RAAF Air and Ground Radio School at Ballarat as a member of No 5 Signaller's Course. Because of the Korean War, with the subsequent loss of a number of Fighter Pilots, FTS Courses were reduced to 15 months. Accordingly, after No 8 course started the initial training phase was reduced to 3 months.



RAAF Ballarat at the time was interesting - for example, it was widely held that the CO, a Wing Commander called Joe Reynolds, was mad. Thinking back I believe this could have been fact.

The WOD was a rather stern individual called "Shagger Marr". Although he did not carry a stick, every Tuesday, after the weekly CO's parade, "Shagger" would bellow out: "Fall out the, Roman Catholics, Jews, unbelievers and Pakistani's" (at the time there were a number of Pakistani's Air Force people doing radio courses at Ballarat).

If you were unfortunate enough to fall into one of these categories, which included me, you were lined up at the back of the parade and marched off to the Barracks Yard. There to chop the





hardest, toughest, Mallee Roots in the Southern Hemisphere. A number of rapid miraculous religious conversions soon materialized from within the ranks.

The Radio School was hard going. The courses were academically demanding and mastering Morse code to the required level was hell. At the time, using high frequency (HF) radio, the Morse code arrangement was the primary form of communication between RAAF Units which included RAAF Headquarters. I had little aptitude for the dits and dars and struggled as a consequence.

Morse training was conducted in four separate class-rooms. The rooms were set up with an instructor at one end with a Morse key with the students scatted around the side of the room wearing headphones. In the first room Morse was belted out at a rate of 10 to 12 words per minute, in the second room 14 to 16 words per minute, and so on through three more rooms until the last where the speed was 22 words per minute. To progress from one room to the next a trainee had to pass five consecutive tests. If you failed one you had to start from scratch all over again.



A test consisted of a five minute burst of six figure code groups and a five minute burst of plain language from a book. Tests were conducted at the end of each session. To pass you had to get 99% of what was sent without an error. At the lower speeds the difference between pass and fail was only two miserable symbols.

I have seen people climb up the wall in frustration after having passed four tests to make one mistake in the fifth and be required to start the process all over again.

Throughout the period Joe had us doing guard duty at least once, sometimes twice, every week. Guard consisted of two hours on and four hours off – not a receipt for rest particularly when we lived in cold wooden huts and slept on collapsible metal beds. In regard to sleep, in addition to four issue blankets, we piled our RAAAF Great Coats and the bedside mat on top of the bed in an attempt to get, and keep, warm.



Joe held a parade every morning with “Shagger” yelling and screaming. The surface of the parade ground was quartz left over from the Gold Rush. Because of the cold, blokes would stay in bed and not go to breakfast. Accordingly, every morning a number of people would faint and fall, face first, onto the hard quartz with a horrible crunching sound.

Guard duty consisted of stalking around the base in the dark, and cold, equipped with a 303 Rifle (no ammo), an axe and a large wooden “Waddy”. The axe was to chop wood for furnaces that generated hot water to outside shower blocks. God knows what the Waddy was for?

The worst part of Guard Duty was associated with two large hangers located remote from the domestic side of the base. It was always pitch black there. In addition, the wind whistled and banged to scare the devil out of the poor unfortunate on guard.



However, these hangers were interesting. A four engine Liberator Bomber was in one and a number of Anson aircraft equipped with early versions of airborne radar in another. In addition, early, portable, ground radars that had been used in the Islands during WW2 the Second War were in a separate compound. I have often wondered what happened to this extremely historic equipment.



At the end of 1952, after finishing the radio and Morse code part of the course, No 5 Sigs course proceeded to the Air Armament School at East Sale for Air Gunnery training in Lincoln aircraft. Great stuff - we blasted away at ground targets at Dutson Live Firing range and at airborne canvas drogue targets towed by Beaufighter aircraft. We fired 50 calibre machine guns from the Tail and Nose Turrets and 30mm Cannon from the Mid-upper Turret.

In December 1952 I received a Signaller's Brevet at a Wings Parade held at East Sale and even though I could not hit a bull in the backside with a bushel of wheat I graduated "Proficient with Special Distinction".



Following graduation, I was posted to No 11 Squadron as a Sergeant Signaller. No 11 Squadron was at Pearce operating P2V-5 Neptune Maritime Reconnaissance aircraft. The P2V-5 was equipped with powerful long-range APS-20 radar, precision APS-31 homing-radar, electronic countermeasures equipment, underwater sonar listening gear and a searchlight. Because of this specialized equipment the P2V-5 would have been the first "Weapons System" to enter RAAF Service.

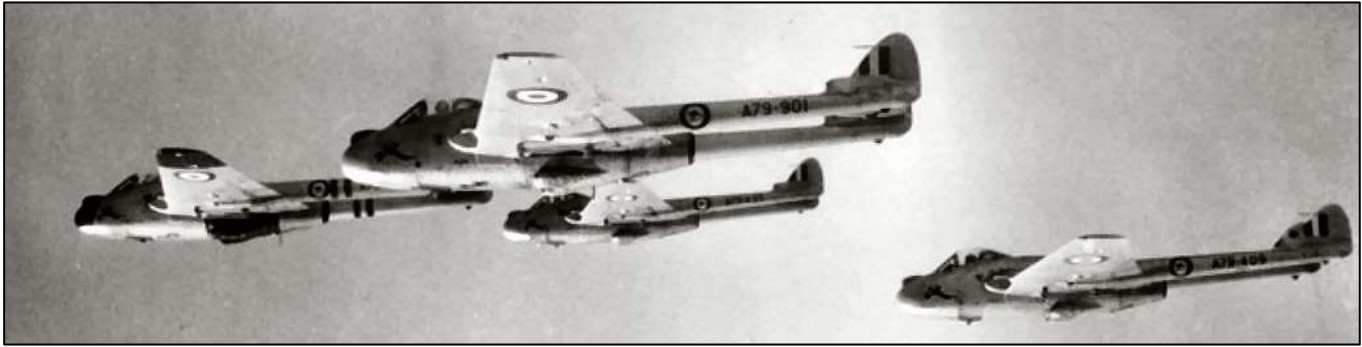
In March 1953 I was a member of the first Neptune crew to attend the Joint Anti Submarine course at NAS Nowra. The course involved a dive in a Royal Navy Submarine and a sortie in the back seat of a Navy Firefly – great experiences both.

It was always my ambition to be a pilot so after arriving at Pearce I spent every penny I could lay my hands-on learning to fly. First at the West Australian Aero Cub, and then, when 11 Squadron moved to Richmond, at the Aero Club of NSW.

After about two years I obtained a Commercial pilot license with an Instructors rating. When this happened, I was offered a job as a flying instructor. I immediately requested a discharge from the RAAF. My request was refused.

However, in April 1955 I was fortunate to be selected for pilot training, the first post-war aircrew member to be selected for pilot training, graduating from [No 21 Pilots Course](#) in March 1956 "Proficient with Special Distinction" with the "Goble Trophy" in my hot little hand. We had trained on Tiger Moth and Wirraway aircraft.

A three month Fighter OTU course (No 23) on Vampire Mk 30 aircraft at RAAF Williamstown followed.



After completing the OTU I was posted to 75 Squadron flying Meteor aircraft. In January 1957, I was posted to No 77 Squadron for conversion to Avon Sabre aircraft. In April 1957, I flew the first Sabre (A94-959) which was built at GAC Fisherman's Bend from Laverton to Williamtown. That aircraft had a very chequered life and was eventually put on display at Fighter World at Williamtown – see [HERE](#)

I was commissioned on 1 January 1957 after promotion to Warrant Officer for one day. I have a framed "Warrant", dated 1 November 1957, signed by the Air Member for Personnel, Air Vice Marshal Allan "Wally" Walters.

In September 1958 I was posted to No 3 Squadron and took part in operation Sabre Ferry to RAAF Butterworth. In Butterworth I served as a squadron pilot with No 3 and then No 77 Squadron during the Malayan Emergency.







In the pic above, I'm on the left of well-known Channel 0 (now Ten) cameraman Mr Peter Purvis of Melbourne, who was filming as a Sabre prepares to scramble at Butterworth. This was in November 1964. I was acting Liaison Officer for a Television documentary, featuring low level runs over the jungle. The documentary was on Australian soldiers serving in Malaya and the coverage of Australian Army Troops in Central Malaya and on the Thai Malay border, as well as RAAF activity at Butterworth.

In January 1960 I was posted to "Test and Ferry", No 2 Aircraft Depot RAAF Richmond, as a Test Pilot. After taking up this position I completed Winjeel and Dakota conversion courses at the Central Flying School (CFS) East Sale.



At the time De-Havilland's were building Mk 35 Vampire aircraft at Bankstown. Our main job was to test fly these aircraft for acceptance into the RAAF. Another job was to test fly MK 4 Meteors that were shipped out to Fairy Aviation at Bankstown from the UK in boxes. After we flew them, they were flittered with radio control gear and used as targets for missile firing trials at Woomera. The Meteors were very early jet aircraft and did not have an ejection seat or pressurization. With extremely limited endurance they were a bit tricky and needed to be treated with a forked stick.

When the MK 35 Vampire program finished, I did an Advanced Navigation (AN) Course at the School of Air Navigation, East Sale. After the course, I was posted to No 1 Applied Training School, RAAF Pearce, as a Navigation Instructor. During the period I also served, along with Bull Pratt, as Navigator of the SAR Dakota based at Pearce. Whenever there was an emergency, requiring RAAF assistance, Bull and I took it in turns to man the aircraft.

In April 1963 I returned to Malaya as the No 78 Wing Navigation Officer. I remained in No 78 Wing during "Confrontation" although posted to 3 Squadron, as a squadron pilot, in August 1964. During this period I also served in 79 Squadron Ubon, Thailand.

In March 1965 I was posted to 76 Squadron at Williamstown as a squadron pilot. In August 1965 I attended the RAF College of Air Warfare in the United Kingdom to qualify as a GD Weapons Officer. After completing the course, I was posted to No 81 Wing, then at Williamstown, as the Wing Operations Officer. In December 1966 I completed number 7 Mirage III conversion course.

In August 1968 I was posted to No 76 Squadron taking command in December 1968. In June 1969 I was posted to No 77 Squadron as CO at the start of the squadron Mirage re-equipment program and while there was called upon to get a Mirage out of the rather short airport at Evans Head (See [HERE](#)). In July 1970, after Bill Simonds took over, I set up the Mirage Photo Reconnaissance arrangement within the squadron as the "C" Flight Commander.

I just took a leaflet out of my letterbox informing me that I can have sex at 75. I'm so happy, because I live at number 71. So it's not too far to walk home afterwards. And it's the same side of the street. I don't even have to cross the road!



In July 1969, 77 Squadron returned to Williamtown to be re-equipped with Mirages and I was one of the original 5 pilots on type.

**77 Sqn, 1969:**

**Standing L-R:** Nick Ford, Terry Body, Jim Treadwell.

**Kneeling L-R:** Ken Semmler, John Archer.



Also on the 20<sup>th</sup> July 1969, FO Norm Goodall, of 75 Sqn while stationed in Butterworth, became the first RAAF pilot to exceed 1000 flying hours in the Mirage.

In July 1971 it was my turn. I wasn't the first to log 1,000 hours in the Mirage but I was the first in 77 Sqn to so do and what a pleasant surprise it was too.

After returning to the Squadron tarmac I was met by a bunch of blokes who had set up a Mirage nose cone on a trolley with a seat and they dragged me round the base, after thrusting a bottle of bubbles into my hand to celebrate the event. This was a 77 Squadron thing, other Squadrons didn't celebrate the milestone this way, I really don't know who the instigator of it was and I guess the same thing happened to other people as a number of other blokes flew many more hours on the bird than me.

But I was the first.







Bill Simmonds congratulating me on reaching 1,000 hours on the Mirage and without putting a dent in one either. He's probably hoping I'd pass him the bottle – not a chance!!



In January 1972 I was promoted to Wing Commander, awarded the Air Force Cross and completed [No 26 RAAF Staff College Course](#) the same year.

In January 1973 I took up an appointment within, the Directorate of Aircraft Requirements Air Office Canberra, as Aircraft Requirements (Weapons). The position entailed the initiation, and management, of RAAF weapon projects. During this period, I completed a Defence Systems Management Course. I also went to Switzerland as the RAAF representative at an International Conference on the Geneva Conventions that had been convened by the International Red Cross.

In January 1976, after completing a Jet refresher course at East Sale, I was appointed as the Base Operations Officer at RAAF Williamtown. In January 1977 I resigned from the RAAF and brought a farm outside Maitland.

I re-entered the service on 1 July 1981, at the RAAF's request, for six months to form No 26 (City of Newcastle) Active Reserve Squadron as the founding Commanding Officer.

On the 13th of April 2015, No 76 Squadron honoured me by naming a Hawk 127 Lead In Fighter (A27-09) after me.

What an honour.

Frustration is trying to find your glasses without your glasses.



Here I am with the current Commanding Officer, WGCDR Ian Goold, they let me sit in one but wouldn't give me the keys to take one for a spin.



My wife shouted at me this morning for not opening the car door for her. I would have, but I was too busy swimming to the surface.

## From the Cockpit: de Havilland DHC-4 Caribou.

Chris Jaensch

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Chris joined the RAAF as a pilot in 2002 and flew the Caribou between 2005 and 2009. During his 12 years in the RAAF he also captained the CT4, PC9, Hawk Jet and the C130J Hercules including flying on overseas operational deployments. The Caribou would however remain his favourite type due to the hands on flying it involved. Without an autopilot or weather radar, pilots were always kept busy going from A to B. Another advantage of flying an unpressurised aircraft was the ability to fly at low level along some tropical beach with a window open and an arm hanging out imitating superman! He hopes the following gives some idea of what it was like to operate the mighty "Bou" or "Gravel Truck" as it was affectionately called.



"A typical Caribou crew consisted of a Captain, Co-pilot and Flight Engineer, who doubled as the Loadmaster and Aircraft Technician. Every Flight Engineer had to have previous experience as a technician on the aircraft. Longer trips would usually involve taking additional "techos" for the ever-likely breakdowns that would occur! The Flight Engineer would stand between the elevated pilot seats for take-off and landing and sit in the cargo area for the majority of flight.







Excellent visibility is available to both pilots and the engine controls are located in the overhead console similar to a Twin Otter. Left to right are the Throttles, Props and Mixtures (which have 3 detents, Auto Rich, Auto Lean and Idle Cut-Off). Further aft in the roof console are the Ignition/Magneto Switches and Carb Heat controls. Flying around with your hands hanging from the throttles sounds strange but is more comfortable and intuitive than one may think. Mounting the engine controls on the overhead console requires less complex rigging in a high wing aircraft for cables to go to the engines and it frees up space between the pilots, which in the case of the Caribou is utilised for a slide out "radio boat" (console). This console houses the communication radios (2 VHF, 1 HF & 1 UHF) and navigation receivers (ILS, VOR, TACAN, NDB & DME). A basic Trimble GPS was also fitted in the 90's. To the Left of the Captain's leg on the sidewall is a vertically mounted hydraulic nose wheel steering tiller/wheel which is used for taxiing and steering on take-off and landing until the rudder becomes effective above 40 knots.

Engine start switches are located in front of the Captain's left knee and there are 3 toggle switches arranged vertically labelled START, VIB and PRIME. The Caribou has the advantage of having a starter motor that is designed to slip if any resistance is incurred in the event of a hydraulic lock so there is no need to pull the blades through by hand prior to engine start. The right engine is started first by pushing the start toggle switch to the right and after turning through 15 blades (or 6 on a warm engine) the Captain calls "contact". At this point the VIB and Prime switches are also pushed right and the co-pilot moves the ignition switch to BOTH. After the engine achieves approximately 600 RPM the Starter and VIB switches are released and 1000 RPM is maintained using the primer only.



Once all parameters and no fire lights are illuminated the co-pilot moves the Mixture to Auto Rich and the primer can be released. Sounds easy hey? Not so easy on a hot engine! A couple minutes later hopefully both the Pratt and Whitney R2000s will be purring away happily with the temperatures in the green ready for engine run ups.

Brakes are checked when taxiing out and the propeller reverse is checked for correct operation (unusual to be fitted on a piston aircraft). This is accomplished by pushing the throttles up in to the roof and then pulling backwards. Two blue lights annunciate on the instrument panel to confirm that the propellers have moved into reverse pitch.

Run ups are fairly conventional but like any radial engine all movements with the throttles should be made as smoothly as possible. Props are checked and cycled at 1900 RPM and the ignition check is carried out at static manifold pressure (roughly 30in at sea level). Because the propellers are not governing at this power it is not only a check of the magnetos but also general engine health. The RPM should be within 50 RPM of that placarded (around 2200 RPM), obtained from initial test flight data.

After engine run ups the before take-off checklist calls for flaps to be set anywhere from 0 to 25 deg. The flap lever is also located in the overhead console behind the engine controls. An indicator instrument panel indicates actual flap position.



A minimum length STOL take-off uses 25 deg flap with a rotate speed of 63 knots at a MTOW of 28,500 lbs. The aircraft can get airborne well below 60 knots but 63 knots is used as it coincides with the minimum VMCA speed (**Vmca** is defined as the minimum speed, whilst in the air, that directional control can be maintained with one engine inoperative [critical engine on two engine aircraft], operating engine(s) at takeoff power and a maximum of 5 degrees of bank towards the good engine(s)). The take-off roll only takes around 8 seconds so this is one phase of flight that one needs to be thoroughly prepared for.



( 30" of MAP (Manifold Pressure) is set on the brakes and once released full power is advanced slowly to 50in giving 2700 RPM. [The manifold pressure gauge is an engine instrument typically used in piston aircraft engines to measure the suction pressure inside the induction system of an engine]. Care has to be taken to limit throttle movement as the supercharged engines can be over-boosted at sea level beyond their 50in maximum. Noise levels are understandably high calling for a good quality helmet. Acceleration is brisk and nose wheel steering is used until the rudder becomes effective at around 40 knots. At this point the captain calls "my controls" and transfers their left hand from the nose wheel tiller to the control column. At rotation speed a reasonable amount of back pressure is used to achieve the climb attitude. Once airborne the captain selects the gear up using a lever just to the left of the throttles (funnily enough, once again on the overhead console!) and asks the co-pilot to select flaps 15. As the aircraft accelerates above 74 knots, flaps are selected up by the co-pilot. At 300 ft power is reduced to METO (42.5in and 2550 RPM) and at 500 ft CLIMB power is selected (35in and 2250 RPM) and the aircraft is settled in to the climb at 105 knots, achieving a leisurely 700-800 fpm depending on the aircraft weight. All throttle movements are made by the pilot flying and prop and mixture adjustments made by the pilot monitoring.



As altitude is gained the throttles need to continually be pushed further forward to achieve 35in as the single speed supercharger loses efficiency. Typical cruise altitude is 9000-10,000 ft using a power setting from the flight manual that equates to 700 brake hp, usually around 31in and 1900 RPM. Below 750 hp, an auto lean mixture can be selected. This results in an indicated cruise speed of around 120 KIAS (Indicated Airspeed) or 140 KTAS (True Airspeed) [**True airspeed** is the speed of the aircraft relative to the air it's flying through. As you climb, **true airspeed** is higher than your **indicated airspeed**. Because of that, **indicated airspeed** will be less than **true airspeed**.] using 600 lbs/hour of decomposed dinosaurs. This gives good endurance with a max fuel capacity of just over 4800 lbs but you are not going anywhere too fast. The good news is there is a spacious area down the back to lie down and a "relief tube" at the back of the aircraft for one to empty their bladder. This goes straight overboard via a drain pipe



(known throughout the squadron as the piss-aphone) and Flight Engineers were known to use a dirty tactic of relieving their bladder when flying in formation directly in front of the following aircraft! The Flight Engineers always tried to stay one step ahead of the pilots and often succeeded!

All primary flight controls utilise cables and the flaps are powered by a single hydraulic jack. Elevator forces are quite light at all air speeds and a manual trim wheel is located on the right side of the Captains seat. I understand that electric trim was not considered for elevator in the event of a trim runaway. A rudder trim wheel is located behind the engine controls and an electric aileron trim provided on both pilots' yokes. Rudder forces again are quite light and remains very effective at low air speeds which enables such a low VMCA. Because of the high positioning of the rudder relative to the aircraft axis the flight manual warns that a rapid application of full rudder at low airspeed can result in an initial roll OPPOSITE to what one would normally expect. Aileron forces are very manageable up until 120 knots where above this speed they get quite heavy.

The Caribou is a very manoeuvrable aircraft, given its vast size. When flying into narrow valleys in Papua New Guinea a "precautionary" configuration of flap 15 could be used, which at around 80 knots enabled better visibility with a slightly nose down attitude and tighter turn radius to exit the valley if bad weather lay ahead. Large wing overs could also be flown which were not only fun but also an effective means of losing altitude after dispatching paratroopers from the rear ramp. Cargo packages ranging from light cardboard "heliboxes" to "A22" loads up to 2200 lb in weight could be airdropped from various altitudes. After being pushed off on temporary rollers attached to the floor, their parachutes would be pulled open with cables attached to the roof. LAPES (low altitude parachute extraction system), could deliver loads up to 4000 lbs flying at a height of 3-6 feet off the ground with the landing gear extended

A quick web search will find good videos on this. The tactic was developed by the U.S. for Vietnam where the aircraft could fly accurately into a cleared area and accurately deliver the load extracted with a parachute. This meant the aircraft didn't have to expose itself to ground fire by stopping on landing. One of the risks of this was that the load could get stuck in the cargo bay with the parachute still attached and creating a huge amount of drag. Apparently full power and an airspeed of 74 knots would allow the aircraft to fly away but I am glad I never had to try out this theory!



Above: LAPES run at RAAF Richmond with the parachute about to extract the load.





Cruise descents are flown at a power of 28-30in and 1900 RPM giving 140 knots and a leisurely 500fpm rate of descent to minimise shock cooling and for passenger ear comfort in the unpressurised cabin. Under boosting a radial engine can be just as damaging as over boosting so we always planned to use at least 1in per 100 RPM for descents where possible (i.e. at 1900 RPM avoid using less than 19"). Re-join checklists cover some more important items such as selecting Auto Rich mixture.

The circuit is joined at 1000 ft with approximately 26" and 2250 RPM and on downwind the landing gear is extended below its limit speed of 120 knots followed by flap 15 selected below 105 knots. The clock is started abeam the landing threshold and the base turn commenced 30 secs later in nil wind. Power around base is 15-17 inches and setting an attitude to achieve 80-85 knots and 15-20 deg angle of bank. Rolling on to finals for a STOL landing should occur at 500-600 ft AGL on a slope considered much steeper than what most aircraft would fly. Flaps 30 are selected below 85 knots and requires lots of forward pressure to counteract the balloon and a very nose low attitude initially results. Finals checks are then carried out, selecting props full fine (full increase in RAAF speak) and the speed is allowed to slow to maintain a threshold speed of 66 knots at typical weights.



Flap 40 (full flap) was rarely used for landing as it only reduces the approach speed by a couple of knots and makes the aileron forces much heavier. This is due to fact the ailerons also droop with flap extension. Aileron authority on finals at such a slow speed is quite poor and requires quite large manipulations of the controls in turbulent conditions leading to the expression of the pilots looking like they are "wrestling a gorilla ". With so much extra drag from the flaps, large power changes are required to fix airspeed errors quickly. A few knots too fast over the fence on a 350 metre strip in a 12 tonne aeroplane can spoil your day quite quickly! Another side effect of the blown wing is that large power increases also result in a lot more lift so one has to be ready to lower the nose as power is increased otherwise you can also end up quite steep on profile. Being fast over the fence also results in the aircraft flying nose low and potentially hitting the nose wheel first. If you nail the speed correctly the flare is commenced at approximately 30 ft (judged visually) and the big Pratts pulled back to idle achieving full back elevator just as the stick shaker comes on with both mains kissing the hard stuff gently - very satisfying when you get it right!

N



Once the nose wheel is on the runway both throttles are pushed up into the roof to engage reverse pitch confirming with the 2 blue lights mentioned earlier. The captain then verbalises "two blues, your controls ". The co-pilot now has control of the yoke and the captain transitions their hand to the nose wheel steering tiller and pulls back on the throttles to increase the RPM with reverse pitch. At 30 knots reverse thrust is cancelled to avoid ingesting too much debris. All this happens pretty quickly and you also need to remember to use the brakes as well to achieve minimum stopping distance.

Click [HERE](#) to see an example.

Parking and shut down is conventional observing a maximum cylinder head temperature of 180 deg prior to moving the mixtures to Idle Cut-Off.



Above: Tep Tep airfield, PNG. 6,969ft above sea level and 10% slope. Not for the faint hearted!

Single engine performance in the Bou was adequate but not startling. I shut down a few engines as precautionary measures and on test flights but luckily never had any failures at critical moments. Because there was no simulator all practice was carried out in the aircraft using "zero thrust" of 15" and 1500 RPM . The large rudder provided ample control in the event of a failure (providing you were above VMCA) and full power on the live engine would return about 300 fpm rate of climb at MTOW and sea level. Like any radial engine however it did not like to be run at high power for long periods and sometimes even after 5 mins the oil temp on the good engine would be reaching the maximum limit during training requiring it to be throttled back. I would not have liked to have had to rely on one engine for 30 mins at METO climbing out of a valley in PNG on a hot day! Conducting STOL approaches required a committal height of 400 ft single engine to allow for the height loss in the event of cleaning up for a go around.





To fly one of the last radial-engined aircraft in military service was a real adventure and leaves me with some great memories. The biggest highlight for me was conducting Humanitarian Relief missions in Papua New Guinea, flying into some airstrips as high as 7000 ft above sea level with density altitudes approaching 10000 ft. Other strips were only 350 metres long and often with a 12% slope and perched precariously on the edge of a ridge line. In October 2011 I was lucky enough to Captain the first Caribou (A4-210) that HARS acquired on its flight from Oakey to Wollongong. When I lived in Sydney, I flew regularly with HARS, including conducting displays at the 2013 and 2015 Avalon Air Shows, but sadly I no longer live in the region to fly with them.



Above: Avalon Airshow 2013. HARS took both Caribou A4-210 & A4-234 from their Albion Park base. This was the first time the Caribou appeared at Avalon since 2009 when it was still in RAAF service.

The Caribou is an incredibly unique aircraft which is adored by those that flew and worked on her. I genuinely hope this iconic aircraft continues to fly with HARS for many years to come and that others out there get the same satisfaction that I do of hearing the roar of the mighty gravel truck at full power, even if we do joke about it being one of the only aircraft that can have a bird strike from behind!"

Chris has produced a wonderful hard cover book featuring the old Caribou – you can see information on the book, and also order a copy from [HERE](#).





## The people I meet.

The Corona Virus tipped the whole world on its head, one day we were as happy as Larry, shuffling along enjoying the out-doors without too many cares in the world. Some of us were selling stuff, others buying stuff, some of us were cooking up a storm, others were being waited on, some of us were flying aircraft, others taking the gamble, it was bliss, then all of a sudden the shutters come down with a bang and we were instantly house-bound, cars were put on moth-balls, hotels and clubs were closed, those with kids became teachers, you couldn't buy a coffee if you had a million dollars and the world stopped. We all became insular, stuck indoors, a lot began to waste away – but not me. I had reserves.



The reason my physique is as close to perfection as you can get and could handle the storm is, I regularly work out at a gym, huffing and puffing for hours on end, day after day, week after week. Perfection does not come easy though, you have to work at it but I've found there is a double benefit from all that hard work, apart from keeping the old body in real good nick, my presence also gives the girls a healthy male figure to lust after. Nature at its best.

Normally, when the world was still normal, I would have to spend some hours in the bathroom before leaving for the gym, applying copious amounts of masking lotion to the body in order to keep that Radtechitis under control and contained upon my magnificence. I found that arriving at the gym with the body clothed in only shorts and a tight fitting sweat-shirt, emanating Radtechitis, was just too much for the fairer sex to handle, they would swoon in bundles, so being the kind and caring individual that I am, I would mask the Radtechitis and keep it hidden.

But now normality has gone, shoppers don't shop, clubbers don't club, cafes don't nourish, everything is shut, including my beloved gym – what was a man to do. For weeks on end all I could do to keep in good nick was to pop 20 or 30 house bricks under each arm and run around the house for an hour or so but then a life line was thrown my way, I was to be allowed into the gym, on my own, for one day a week, not a lot but at least it was a start.

My allocated day at the gym arrived, I was so excited I was trembling. At 4.00am it was into the bathroom, a bit of Mum under the arms, a dollop of Brylcreem onto the hair and some Johnson's baby oil on the body to mask the Radtechitis, then into the P76 and off to the gym I went.

By 10.00am, I'd run 45 miles on the treadmill and cycled 100 miles at 37 MPH on the bikes and was starting to break out in a sweat while enjoying the light workout. What I didn't know though was, as I'd made ready in haste before leaving the home in the P76, some areas of the magnificence were coated only thinly with baby oil and a tiny whiff of Radtechitis escaped while I had the head down peddling like a man possessed. That elusive whiff was whisked from the



gym via the air conditioning ducts and caught in the breeze, headed north. Some miles away, the lovely Rhiane Grygoruk, an Exercise Physiologist who cares for worn out old blokes and who is known to all the world as Blaze, was happily going about her day, painting the back fence while humming Mozart's Piano Sonata No 11 to herself. 20 or so minutes after it had left my person, that whiff of Radtechitis was detected by Blaze just as she was finishing Mozart's second movement.

Blaze knew instantly from where that Radtechitis originated as there was a faint whiff of Mentolatum Deep Heat accompanying it, she knew it was coming from her gym – and she wanted some. Dropping the paint brush onto the back lawn, she raced next door and snatched the skate-board from the young girl who was playing nicely in her front yard and took off down the centre of Gympie Rd at warp speed, hair streaming behind, scattering cars left and right, heading for the gym.

As quick as a wink, she dashed into the gym, nostrils flaring, eyes aquiver, shaking with anticipation and headed towards me with arms spread wide. Luckily I was within reach of an implement with which to defend myself and for a few milli-seconds I kept her at bay but then succumbed and allowed her to wrap herself upon my person for forty or so minutes while she absorbed some of that magical Radtechitis.



Eventually I extracted my personage from her grasps and with a wide smile upon her face, she headed for home a very satisfied lady.

Such is the torment a Radtech must endure!



Blaze was born and bred on Queensland's Sunshine Coast and always had a love of sport. Whether playing as a toddler or competing at a national level, she would be active every single day. After high school she moved down to Brisbane and immediately commenced a tertiary education completing a Bachelor of Clinical Exercise Physiology at the Queensland University of Technology (QUT). This course is the study of how to manage and prevent chronic disease and rehabilitate physical injuries through exercise and lifestyle intervention.

Why did she go down the healthcare route rather than sport side of things you ask? Well she was diagnosed late in year 11 with [Myalgic Encephalomyelitis](#) (neuroimmune condition) and along with her own illness and the disadvantages of it, (her family has also been struck with multiple health issues such as varies different cancers, heart disease, joint replacements and mental health. Growing up a few family members' conditions stuck out, my sister had a genetic disorder: Infantile Refsum disease leaving her wheelchair bound with little to no physical function. He says "Living in the same home watching someone with a debilitating condition changes the way you look at life and how you and those around you live it, hence why I chose to peruse a career in allied health; to ultimately help others."

Blaze joined Active Body Conditioning (ABC) at their Enoggera (Qld) practice in 2019 and along with her other dedicated workmates, helps ease some of the problems experienced by a multitude of old diggers and diggeresses. If you are an ex-ADF person and you have a few aches and pains, or you're a bit overweight, a bit stiff, or perhaps you experience PTSD from your time in, you should think seriously about seeing ABC – you will be amazed how much they can help. Do yourself a favour, ring big Russ today on 0401 857 859, ABC has practices everywhere.



**DURING THE MIDDLE  
AGES THEY CELEBRATED  
THE END OF THE PLAGUE  
WITH WINE AND ORGIES  
DOES ANYONE KNOW IF  
THEY HAVE ANYTHING  
LIKE THAT PLANNED  
WHEN THIS ONE ENDS?**

**(ASKING FOR A FRIEND)**





## Perspective.

It's a mess out there right now. Hard to discern between what's a real threat and what is just simple panic and hysteria. For a small amount of perspective at this moment, imagine you were born in the US in 1900.

- On your 14th birthday, World War I starts and ends on your 18th birthday. 22 million people perish in that war. Later in the year, a Spanish Flu epidemic hits the planet and runs until your 20th birthday. 50 million people die from it in those two years. Yes, 50 million.
- On your 29th birthday, the Great Depression begins. Unemployment hits 25%, the World GDP drops 27%. That runs until you are 38. The country nearly collapses along with the world economy.
- When you turn 39, World War II starts. You aren't even over the hill yet. And don't try to catch your breath. On your 41st birthday, the United States is fully pulled into WWII. Between your 39th and 45th birthday, 75 million people perish in the war.
- Smallpox was epidemic until you were in your 40's, as it killed 300 million people during your lifetime.
- At 50, the Korean War starts. 5 million perish.
- From your birth, until you are 55 you dealt with the fear of Polio epidemics each summer. You experience friends and family contracting polio and being paralysed and/or die.
- At 55 the Vietnam War begins and doesn't end for 20 years 4 million people perish in that conflict.
- During the Cold War, you lived each day with the fear of nuclear annihilation.
- On your 62nd birthday, you have the Cuban Missile Crisis, a tipping point in the Cold War. Life on our planet, as we know it, almost ended.
- When you turn 75, the Vietnam War finally ends.
- Think of everyone on the planet born in 1900. How did they endure all of that? When you were a kid in 1985 and didn't think your 85-year-old grandparent understood how hard school was. And how mean that kid in your class was. Yet they survived through everything listed above.



Perspective is an amazing art. Refined and enlightening as time goes on. Let's try and keep things in perspective. Your parents and/or grandparents were called to endure all of the above, you are called to stay home and sit on your couch.



**Colin Benson** was a Radtech G and served with 2 Squadron in Phan Rang from 17 June 1969 to 19 June 1970. He says:

The start of my 367-day journey to Vietnam from Sydney was via Darwin then Singapore to Tan Son Nhut, on 18-19 June 1969, in a QANTAS B-707 V-Jet. I don't recall walking across the tarmac at Singapore, but remember that every serviceman aboard (navy, army, air force) changed into a civvy shirt and we walked through

the terminal past rope barriers to get to breakfast and return. We changed back into our military shirts (RAAF drab, army khaki) after Singapore, en-route to Saigon. We arrived in Saigon about 0900. As I reached the bottom of the stairs at Tan Son Nhut, my former apprentice course-mate and fellow RADTECHG. Nev Davis, whom I was replacing, was waiting to board. When I asked what it was like, he said, "You'll find out!"



From Sydney to Saigon, I sat beside a young RADTECHA from 19 Radio Apprentice Course who was going to Vung Tau. After Darwin, he had an intimate relationship with his dinner that I have never forgotten (on, reflection – officer material)! Alan George recalls that even. He later became commissioned and retired as a Group Captain after serving for 39 years! Only recently, I realised, he had graduated only 10 months before being posted to Vietnam. 50 plus years on, we occasionally chat or exchange comments on Facebook.



Throughout the day, at Ton San Nhut, small groups would leave. We weren't given any food during the day and had no money to buy anything if it was available. Some Americans allowed us to have water from their water coolers. The official currency for our use was MPC (Military payment certificate) we'd been told using our Aussie money would have us arrested for black-racketeering. After shifting from side-to-side on our butts and occasionally walking short distances from about 0930 until 1730, those remaining were taken by bus to a USAF C-123 Provider. There was cow manure on the floor, so the bus departed and returned with a sheet of plastic. We were then briefed by an American airman wearing the dagggiest fatigues we'd ever seen, "If the hooter sounds while we are taking-off, brace yourselves – we're going-in! If the hooter sounds as we are landing, brace yourselves – we're going-in!" ...a great introduction to the war... being told you're likely to die the first day!

I think officers and warrant officers were told to board and use the seats along the side of the fuselage before the engines were started. As the first engine started, it belched smoke and flames

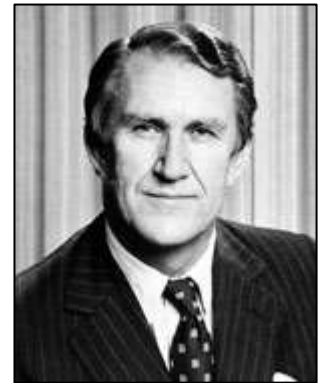


from the exhausts and popped quite loudly. I'm sure several ORs waiting to board soiled their pants! The second engine did the same before they both gained revs. I wasn't concerned as one of my mates, "Shorty" Hodges, had written and told me about these aircraft, and I thanked him! We ORs (I was a corporal; promoted a few months later) were seated on the floor on the plastic covering the cow manure, about five or six abreast with cargo straps as "seat belts". As we rotated on take-off, and we all slid towards the tail, I feared we may change the CoG to the extent that we'd stall... and crash! I'm sure there were more soiled pants!

At cruising altitude of about 1,500 feet, we flew through low clouds and condensation came through the fuselage as a shower of rain and drenched several of us. There was a window missing on the starboard side that let in fresh air – it was a flap just forward of the propeller. As we descended, very steeply, into Vung Tau, all slid forward, I again feared we'd change the CoG such that we'd crash. Upon landing, heavily, on the short, steel runway, we all came forward against the straps as reverse pitch and brakes were applied to stop the aircraft. At Receipt and Dispatch, I saw a familiar face I had known in Darwin, the first person I had known for several days.

I don't recall having dinner at Vungers that night. I met a few colleagues in the boozier before spending the night in a transit hut at Vung Tau. As a few of us were getting bedding, the WOD told us there was to be a practice attack that night and we were to stay in our room and keep out of trouble! Boy, what is this war with a practice attack, I thought! The following morning, I flew from Vung Tau to Phan Rang in a RAAF Caribou with "Wallaby Airlines". I had someone to chat with as two TELSTECH from Base Support Flight were going on an end-of-tour jolly to Phan Rang and wherever the Caribou went after that. I was pleased that we arrived in time for lunch. After going to the store to collect a rifle, flack jacket, tin hat and other essentials, I staggered into the COMCEN to introduce myself!

Australia's defence minister, Malcolm Fraser, was aboard a C-130 that arrived that afternoon. Extraordinarily, it stayed over-night. I was assigned the top bunk opposite Arthur Rennick! At about 0100 hours, I was awakened by the PA system that had more 50Hz hum than audio telling everyone to take cover! "Charlie" was lobbing mortars to welcome Australia's defence minister! [Someone had told me to always wear my tin hat when going into a bunker! On another night, when running into the bunker, my helmet struck the overhead beam and I landed on my butt!] Once I had settled-in and became familiar with my duties, I found there was a large current flowing along the audio line from the CAT 240 volt generator in the domestic area to the COMCEN PA amplifier. With help from a TELSTECH I worked with (either Steve Abrahamson or John Miller), I made an isolation transformer that eliminated the hum on the PA system in the domestic area.



Later, the Americans gave us a device that activated our PA system and connected audio from their giant PA system on the hill beside 2 Sqn domestic area and over-rode our PA audio. The system was tested each day at 1700 hours and was used as a signal to test our domestic defence system directed by our "new" CO, WGCDCR Jack Boast.





On several occasions, as did others, I flew around South Vietnam in C-123s as supernumerary crewman on my day-off. The first of those flights was to Ban Me Thout in the highlands. After the first landing attempt in clouds was aborted, the flight engineer or loadmaster told me to move from sitting on the box of chains to guard against ground-fire to the rear of the aircraft because, "This crazy SOB is going to crash this aircraft, and the only people who survive are in the tail!" We landed on the third attempt, on a sloppy clay runway - a lopped-off mountain top. The tail ramp was lowered and, as we turned at the end of the air-strip, the wing was over the edge. The load of corrugated-iron and other building material was kicked out as an American green beret soldier yelled, "Get out of here, you attract Charlie's attention!"



#### A Blonde goes to Heaven.

A Blonde was sent on her way to Heaven. Upon arrival, a concerned St Peter met her at the Pearly Gates. 'I'm sorry,' St Peter said; but Heaven is suffering from an overload of godly souls and we have been forced to put up an Entrance Exam for new arrivals to ease the burden of Heavenly Arrivals. "That's cool" said the Blonde, 'What does the Entrance Exam consist of?

"Just three questions" said St Peter. 'Which are?' asked the Blonde. 'The first,' said St Peter, 'is, which two days of the week start with the letter 'T' '? The second is 'How many seconds are there in a year?' The third is 'What was the name of the swagman in Waltzing Matilda?

"Now," said St Peter, 'go away and think about those questions and when I call upon you, I shall expect you to have those answers for me. 'So the Blonde went away and gave those three questions some considerable thought. The following morning, St Peter called upon the Blonde and asked if she had considered the questions, to which she replied, 'I have.

"Well then," said St Peter, 'Which two days of the week start with the letter T? 'The Blonde said, 'Today and Tomorrow.' St Peter pondered this answer for some time and decided that indeed the answer can be applied to the question. 'Well then, could I have your answer to the second of the three questions?' St Peter went on, 'how many seconds in a year? 'The Blonde replied, 'Twelve!' 'Only twelve?' exclaimed St Peter, 'How did you arrive at that figure? "Easy," said the Blonde, 'there's the second of January, the second of February, right through to the second of December, giving a total of twelve seconds.

'St Peter looked at the Blonde and said, 'I need some time to consider your answer before I can give you a decision.' And he walked away shaking his head. A short time later, St Peter returned to the Blonde. 'I'll allow the answer to stand, but you need to get the third and final question absolutely correct to be allowed into Heaven. Now, can you tell me the answer to the name of the swagman in Waltzing Matilda?' The blonde replied: 'Of the three questions, I found this the easiest to answer. "Really!" exclaimed St Peter, 'And what is the answer? "It's Andy." 'Andy?!?' 'Yes, Andy,' said the Blonde.



This totally floored St Peter, and he paced this way and that, deliberating the answer. Finally, he could not stand the suspense any longer, and turning to the blonde, asked 'How in God's name did you arrive at THAT answer? 'Easy' said the Blonde, 'Andy sat, Andy watched, Andy waited til his billy boiled.'

And the Blonde entered Heaven...

## Bomb sights.

George Hatchman, (right) ex WO Instruments, saw our story on the [Norden Bomb Site](#) in our last issue, he says: "Flight Sergeant Lionel Otto, RAAF WW2 Aircraft Instrument Fitter, was the RAAF's WW2 Norden Bombsight Specialist .. I knew him well as I was the RAAF's 82WG T4 Bombsight Specialist in late 1960's.

I have attached some extracts from Lionel's biography plus info on my Bombsight background."



*I became very friendly with the famous Scotty Allen and we worked together to master what was known as 'skip bombing' by dropping torpedoes from 40 to 50 ft above the sea so they bounced and entered the enemy warships around the armour plate level. We were able to have a victory in the Coral Sea deploying this method. Later I was posted to a Liberator bomber wing in the Northern Territory which was equipped with the famous Norden*



*Bombsight, but there was no equipment available to test and maintain it properly, so I made the first test equipment in the RAAF and dismantled the complete auto pilot and bombsight from a crashed bomber and set it up in an instrument section and showed the aircrew the correct method to using the bombsight.*

### **Lionel Otto**

*The result was a large number of ships sunk and many successful bombing raids. In the latter part of the war I was plagued with abdominal trouble and had my appendix removed in a tent and was in hospital when the war finished in 1945. I returned home to be discharged and I will never forget reading the honour list in the local paper and saw my name honoured by the late King George VI for what I had done 'Mentioned in Dispatch.'*

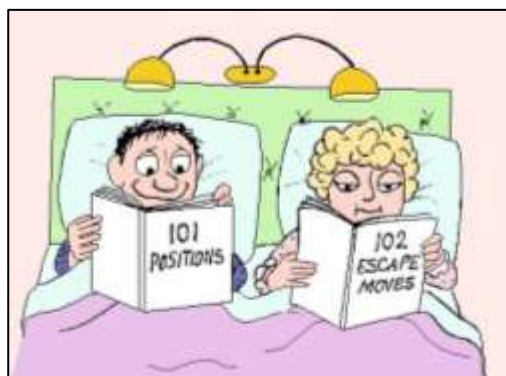


George says: "As a young Corporal Instrument Fitter, I was appointed as the RAAF's 82WG's GAF Canberra Bomber T4 Bombsight Specialist leading up to the Vietnam War (circa 1965- 68) and on tasking by request of the Defence Weapons Research Establishment (WRE) SA, I conceived and carried out the initial prototype modifications to the design on the Bombsight Computer to enable the Canberra's to have an accurate lower level bombing capability and subsequent use in that theatre (the T4 Bombsight were originally designed for hi-level 'Dumb' bombing with an effective bombing altitude ranging from 7,500ft up to 52,000ft' - well before the concept of SAM's).



I effectively modified the bombsight computer by incrementally profiling the altitude input servo 'Pneumatic Height Interrupter Blade' to proportionally input scale inclusion of 7,500ft down to 0ft calculations. My modified T4 Bombsight was sent for testing to WRE in SA and I was later informed that while my modified bombsight calibrations were accurate, the T4 (being an analogue computer) was found to be too slow in progressive update of release data to the Sight Head Reticule so at altitudes lower than 7,500ft this 'lag' time would make it impractical and unsuitable for low level bombing operations, however, the computed bombing ballistic data recorded from bench testing my modified bombsight was subsequently utilized by WRE to adapt a manual feed-in of the calculated ballistic data to the Bombsight Sight Head (by-passing the need for the computer to input incremental predictive reticule sighting release servo data) which proved very effective and accurate (not unlike the WW2 'Dam busters' principle). I was tasked later to supervise the accuratisation of the T4 Bombsight Sight Heads at 3AD prior to their operational fitment and the Canberra Bomber's deployment with 2SQN to Vietnam.

2SQN received a United States Presidential Unit Citation for their bombing mission capability in Vietnam and no doubt the T4 Bombsight's accuracy contributed to this success. History does not formally record my contribution to the success of Canberra Bomber's Vietnam War bombing accuracy with the only verification being entries documented on my RAAF Record of Employment but I am quietly proud of the legacy of my initial input."







Al Chiesa sent us this great pic. We've had to crunch it to let the page open faster, if you want the HD version, just click the pic.



Mike Gahan sent us this one – guess where?





## Wanna buy a real Herc?

A genuine real 1958 Lockheed C-130A Hercules. (Only flown by an old lady to church every Sunday?)



Having garnered many milestones and accolades including “the longest, continuous military aircraft production run in history,” the C-130 (“C” for Cargo) factors into countless rescues, attacks, war stories, and other operations. This 1958 Lockheed C-130A in Airport Drive, Louisiana comes to market, eligible for civilian purchase at the asking price of only \$1,300,000 USD – a steal. High praise to the seller for not making that \$1,295,999!



First flown in 1954, the C-130 proved to be highly manoeuvrable and its pressurized hold accommodates troops or cargo, both of which can be dropped into battle. The high-wing design and integral rear ramp eases loading and unloading. Popular Mechanics called the C-130





“Badass.” (See [HERE](#)) Swallowing 452 desperate passengers during the American withdrawal from South Viet Nam (well above its normal capacity of 90) the Hercules took flight and delivered all safely to its destination, lifting a total cargo later calculated at 20,000 lb above its operational limit.



This aircraft includes the C-130’s LAPES rollers (Low-Altitude Parachute-Extraction System), as the world’s only civilian example. Designed to swallow an M551 Sheridan Tank in its huge car-length hold, the C-130 could make the ultimate car transporter when last-minute detailing threatens your plans to show at Pebble Beach.







Although cheap to buy, you'll have to do a D service on the old girl before she can fly it and that could cost a few bob – but there's probably plenty of old 36 Sqn blokes just hanging around doing nothing, who would love to hop in and give you a hand.



The Herc is normally driven by four Allison T56-A-1A turboprop engines which produce 3,750 HP each but only two engines are described in the listing which could be a problem as the A model is a lot happier with four. Like many wedding singers, the Curtiss-Wright propellers feature variable pitch.

If you're interested, you can arrange a visual inspection with [Barn Finds](#) but a test fly is not recommended.

Raise your hand if you've been drunk for the entire month of April.



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## Allan George's Gems

### The Bombing of Bankstown.

**SYNOPSIS:** The late Owen McKenna was the brother of my late father-in-law. He was a RAAF pilot during WWII, he wrote the attached in 1987. This is an account of an RAAF divebombing training exercise at (NSW) in 1943, when two aircraft collided and a wireless air gunner was killed. The author was pilot of the aircraft in which the air-gunner was flying.

Someone got hold of yesterday's Sydney Morning Herald and it passed casually from hand to hand as we lolled around in the dispersal bay watching a couple of Wimeways do circuits and bumps while our ground staff fiddled under the aircraft we'd be taking up that afternoon.

This was Bankstown aerodrome on a fine autumn morning in 1943, the air still holding some of its dawn chill, but crisp and dewy-sweet and not a cloud in the sky. We were pilots and wireless air-gunners of 24 Squadron enjoying a break in the routine of dive-bombing exercises in preparation for a tour of operations in the north with Vultee Vengeance dive-bombers. The Vultees hadn't arrived yet and in the meantime we flew Wimas. (Between May 1942 and Apr 1943, 400 Vengeance aircraft were delivered to the RAAF, but they saw little combat. They were used mainly as training aircraft.)

The skimpy sheets of the wartime Herald made fairly ho-hum reading: Final Battle Looms in Tunisia, RAF Bombers over Wilhelmshaven, heavy Spitfire losses in Darwin Air Battle, Japanese Submarines off Queensland Coast, Vic Patrick to fight







Les Sloan at Rushcutters Bay Stadium. The pie-cart men had been around and we munched contentedly on the hot white pastries with a half-pint bottle of cold creamy milk on the side.

I glanced across at my wireless air gunner, fellow sergeant John (Pat) Patrick. He was munching well. We had become pretty good mates since teaming up a few weeks before at the start of the third dive-bomber course to go through Williamtown. We had flown one exercise that morning - a low-flying run down the south coast. This afternoon there was to be a dummy divebombing attack by six B Flight aircraft on Bankstown aerodrome itself. We'd be under attack on the way in by a couple of Aircobras from a detachment of the nose-wheeled fighters stationed at Bankstown for the defence of Sydney. An argument started over the likely winner of the Patrick-Sloan fight on Saturday night. Someone asked Pat if he was any relation to the boxer Vic. He said no.

Suddenly it was noon and the tender arrived to take us back around the aerodrome boundary to base and lunch.

Early afternoon sunlight is slanting through the windows of the flight room as we slouch on well-worn benches waiting for final briefing. A couple of addicts are strafing the dart board in a game of 201-up. The air, heavy with tarmac smells, quivers faintly to the revving of distant engines being warmed. There is time to reflect on the likely scenario for this afternoon's war games. After take-off our six Wirraways with their two-man crews would form into two flights of arrowhead V, known in the trade as vic formation for a slow climb to 6000 feet. At that height, on the leader's signal, the wing men would close in and the two vics link into a tight line astern pattern. Tightness in formation, we'd had drummed into us at Williamtown, was of the essence of the divebombing contract.



Our side had learned from combat with the Luftwaffe's famed Stukas in France and other war theatres that a dive bomber distanced from its mates made easy pickings for an attacking fighter. The Stuka's single rear gun was no match for a burst of fire from the wing guns of a Spitfire or



Kittyhawk, but dive-bombers in tight packs of three, wingtip tucked behind wingtip, separated only by the few feet of clearance needed for spinning propeller blades, formed a formidable platform for what then became a battery of swivelling rear guns.

Tightness also gave great manoeuvrability. Three in vic formation could weave as one on their approach, making a difficult target for ack-ack gunners and turn steeply towards an attacking fighter in the standard air-to-air defence ploy. By contrast, wing men in a loose pattern had no chance of keeping station in a hard turning situation.

Beside me on the bench, Pat gave me a nudge. "You want to back Sloan on Saturday night?" I said no. The trouble with tight vic formation for divebombing was that it had to be broken up to allow planes to one by one into their follow-the-leader dive. The drill for this was to go into echelon, one of the wing men sliding down and under the other two in his vic to form a staggered line running diagonally back from the leader, usually to starboard, or echelon right.

From echelon, the leader could peel into his dive unobstructed, the wing men rolling after him like a Tivoli chorus line in one of those domino-style collapse routines. The peel-off, winging over into a half-roll, nose dropping, a feeling of weightlessness as the dive approaches the vertical, altimeter needle spinning its message 4000ft .....3000.....2000 .....then a press of the bomb release button and a heave back on the control column. Pulling out of the dive, a leaden drag on head and shoulders, sometimes vision dimming in a brown out as G-force slows blood flow to the brain, scurrying now in a flutter, skidding 250 mph descent to the relative safety of low altitude.

On the bench, Pat turned to me again. "You sure you don't want to back Sloan?" I didn't have time to answer. Briefing was about to start.

The general idea, the briefing officer explained, was theoretically to wipe out the headquarters hut of the Bankstown administration area. As we approached Bankstown from the north--west, our rear gunners would theoretically shoot down the attacking Aircobras and our six aircraft would then dive on the base and theoretically drop bombs on the target hut with great accuracy, leaving no filing cabinet unscathed, so to speak. There was some routine detail about heights and speed and forming up after the dive --- then a surprise. We would not, the briefing officer said, switch to echelon formation before the dive, instead, we would maintain vic formation right up to peel-off.



Using his hands in the time-honoured pilot fashion, he showed how the formation leader would go into his dive by pulling up and over the wing man on his left, followed by that wing man, with the remaining one of the first vic going in last. The second three planes would follow suit.

By staying in vic right up to peel-off, so the briefing went, we would be able to maintain the defensive strength of rear guns bunched close and the time spent in echelon, when we were



most vulnerable, would be eliminated. "Take-off is at 1500," the officer said. We filed out to the tender waiting to take us to dispersal, helmets in hand with headphone cords dangling coiled and loose, parachutes slung haversack-style across the shoulder. Sometimes parachutes could be left in the cockpit seat between flights, but if there was to be any maintenance carried out on the plane, with a risk of oil drips or other damage to the pack, the rule was strictly takeaway and BYO.

As we climbed into the tender, I told Pat I still wasn't interested in backing Sloan.

Take off took us low over the backyards and parks of Sydney's south-west as we formed into flights of three and swung north. To port and above, 10 o'clock high in RT' language, we spotted the slim shapes of two Aircobras on their way to an attacking rendezvous with us. Below, it was the time of day for schoolkids to start straggling home, kicking at tins and hop-skipping the footpath cracks, mums would be bringing in the washing, civilian dads would be wondering if they'd be able to get a couple of bottles for the weekend.



At 6000 ft we levelled out and, on the leader's signal, closed ranks. Our two tight formations of vic were now about five minutes flying time from Bankstown. More than likely, we were noticed briefly by a few people going about their business in Parramatta. Looking up, they would have seen a gaggle of single-engined aeroplanes stacked up like racing cars on the starting grid, a cluster of little plus signs etched black against the sky, moving with the deceptive slowness of height.

Now we are down to serious business, a Wirraway six-pack flying close enough to make out each other's fuselage rivets. For a pilot, the world has shrunk to the size of a cocoon rimmed with perspex. Nothing matters but holding position. In still air, straight and level, this is an easy enough assignment. In turbulence or steep turns, it calls for good reflexes and an occasional burst of devout, inspired blasphemy.

I am flying number three, wing man on the port flank of the leading three. From there I have a great view of the sun and the muddy-green fuselage of the leader's aircraft, his gunner now facing rearwards in the direction of an expected Aircobra attack, crouched over his gun sight and mentally taking deflection shots at an oncoming foe. In the cockpit a few feet behind me, Pat would be a mirror copy. We are weaving, the leader signalling turns to left or right with the motion of an open hand, palm outward, face-high. Radio silence is absolute. Against the sun I glimpse a shadow swooping steeply past us, crossing our path in a diving turn and another. The Aircobras have struck. Soon they'd be back. We turn again and again.

The two planes came together in a ferocious, sliding kiss, metal screeching through metal as the airscrew blades of one sliced into the underwing and belly of the other, the bodies crunching briefly, explosively, then falling apart bruised and spent. One is crippled and smoking, its blades bent back grotesquely over the radial engine cowling, drifting away in a sick lurch; the other





leaves a silvery spray of petrol from a pierced wing tank as it pulls clear, a long, jagged cut running across its underside and under-carriage housing area, upper body undamaged.

It was an eerie feeling to be suddenly alone up there, peaceful, quiet, no sensation of speed or falling. Just an awareness of mid-air isolation, nothing to reach out and touch. The horizon was back in its right place and a fair stretch of New South Wales formed the landscape. I had pulled the ripcord a few seconds after leaving the aircraft and waited for the jerk we'd been told to expect when parachute straps bit into the crutch on the opening of the pack. But there had been no jerk. No indication at all that the chute had opened. Oh, well, nothing could be expected to work perfectly all the time. I wondered whether there was any point in looking up to see if perhaps, just perhaps, the chute had opened and that there was, indeed, a silken canopy holding me after all. I did - and there was. I must have been falling head-first when it opened and taken the jerk of straps, unnoticed, on my shoulders.



From where I landed, in a space between buildings at the edge of the Bankstown parade ground, it was a journey of only a minute or two to the base hospital where I was treated for superficial injuries and put to bed. It was a small ward with just one other bed, empty. I waited for Pat to be brought in to occupy it. They told me the other plane in the collision had made a safe, wheels-up landing. That was all they knew for now.

From the hospital bed I could recall those few nightmarish moments and let fragments of vivid recent memory play themselves out against the white of the ward ceiling. It had been only a split second before impact that I realised the leader's aircraft was not in a steep turn, but peeling off into a dive. By then we had completed nearly 90 degrees of roll and were locked into disaster. Came the crunch and with it a sudden plunge from sunlight into a blizzard of white smoke spewing from an engine abruptly silenced as the blades it was driving hit steel.

I swung to see how Pat had fared and caught a glimpse of goggles and a patch of white face framed in leather, facing forward, moving. Through the goggles our eyes locked for the brief instant needed to register understanding. What had never been more than a remotely feared possibility, if thought of at all, was now reality. Surely it was always "someone else" who, in the language of the day, "brought it" or faced a leap into space in the ultimate emergency. Now it was our turn.

The smoke thinned a little and the twisted aircrew blades turned jerkily as the engine spluttered. No flames yet. The horizon was angled and low. I was partly hanging in the straps as I pulled the seat harness release pin. Exit was an ungraceful slide not the clean, leg-propelled leap intended and I found myself out of the cockpit but not free of it, held by the radio cord running from its socket to earphones zipped into their helmet pouches. I had neglected to unplug its single prong and, pulled at an angle, it held firm. Now I was held pressed against the side of the aircraft by combination of cord and slipstream, little more than an arm's length and what seemed the promise of a knock on the head from the tailplane. For several seconds I struggled and kicked and suddenly was clear, somehow missing the tailplane.



It was later that night in the hospital they told me Pat was dead. He had jumped but something had gone wrong. His unopened parachute was found a short distance from his body. On Saturday, May 1, the Sydney Morning Herald carried a brief item at the bottom of an inside page:

### RAAF MAN KILLED IN CRASH

Sgt John Charles Weir Patrick, wireless air-gunner, of Newcastle, was killed when two planes collided in mid-air near Sydney during training exercises. One aircraft landed safely and the other occupant of the aircraft in which Sgt Patrick was flying parachuted to safety.

On Sunday, May 2, with Sgt Guy Main as my wireless air-gunner, I resumed flying. The log book entry records a 65-minute flight of "fomnation divebombing."

### --- EPILOGUE ---

Arising from the incident I was fined five pounds for "careless flying" and posted to 25 Squadron (Vultee Vengeance dive bombers) at Pearce where a few months later I turned 21. The following year I was commissioned and posted to fighters.

As an unnecessary reminder of that April day in Bankstown, I hold Kangaroo Club membership plaque No. 55 as an aircrew member who "made a compulsory bale-out using a Dominion parachute."

I have written this story as a salute to the late Sgt John Patrick, to FSgt Harry Olsen, who was my wireless air-gunner subsequently for more than a year of dive bomber flying with 25 Squadron and to all RAAF air-gunners who almost daily faced situations of risk similar to that which cost John Patrick his life.





## A Fed-Ex pilot's view of the crisis.

"FedEx still operating close to peak internationally, but we've slowed severely domestically. Balances out financially, as we're still "above the line" (reference our last quarterly earnings statement). We've pulled 4 "semi-retired" FedEx MD-11s out of the desert and sent them to the Pacific (where I've been operating for the past 2½ months). Every run we're flying there (between Honolulu, Sydney, Guangzhou, Osaka, Narita, Singapore, Thailand, Hong Kong, etc...) are maxed out. No one else flying, so all that residual cargo is being directed our way.

That being said, every route is nearly empty, and every airport is completely full of parked jets. A couple of examples: Flew from Osaka to Beijing during 1 segment of a trip and saw only 2 additional aircraft airborne the entire flight. During the time we fly that route (one of the busiest in the world), nearly 100+ additional aircraft are normally airborne. Silence on the radio, from the controllers, etc... most pacific airports have 1 controller that



now covers regional approach, tower, and ground... ALL 3 of them. We landed in Beijing and were the only moving aircraft the entire time we taxied in, dropped our cargo, reloaded, and taxied out. Saw 2 other aircraft moving on the ground as we took off. But that was it.

Literally 600+ aircraft parked in every square inch of concrete on that airport. Beijing (and most airports like it) are down to 1 runway, with all additional being used as parking lots for aircraft. Very eerie to see it like that. Was lucky enough to have a United deadhead back from Osaka to SFO at the conclusion of one of my runs. Osaka is one of the busiest international "jump-off points" in Japan and FedEx has a great facility there. From the time I made my way from the FedEx aircraft we landed there, checked in through one of the largest customs facilities I've ever seen (at Osaka International), took an inter-airport train to the international terminal and finally made my way to the only 1 of 6 lounges open to await my flight's departure (United), I only saw 2 people in the entire airport terminal.

That United flight was on a 787 and Polaris Business Class (which normally holds about 36 people) had 4 of us in it. The entire aircraft had about 40 people total... most were United employees (aircrew and attendants) repositioning back to the United States after their routes had been cancelled. This was United's last flight between Osaka and SFO for a long while (apparently), and there were many hugs and tears with United personnel, Japan airport folks they knew, etc... And the entire United ground crew lined up in a formation to salute the aircraft as we departed... reminded me of Navy cruises when we were launching aircraft to head back to the beach after 6+ months.

Global devastation and economic impacts are very apparent as one travels as much as we do internationally. This is going to take YEARS to recover and return any semblance of "normalcy" (if that term is even relevant any longer) to many areas all over the globe. Incredible to see the lengths FedEx goes to, to keep us all healthy and protected through this mess. My hats off to our





dispatchers, ground managers, and everyone on the team who's making it happen safely for us all as regulations and customs requirements literally change day to day, flight by flight.

Have a look at [THIS](#).

Will we ever see this again?



## World War II RAAF Spitfire wreckage discovered in Litchfield National Park.

On the 30th June, 1943, Flight Sergeant Colin Duncan, and his squadron (452) of Spitfires took off on a mission to intercept 48 Japanese aircraft over Darwin.

On the 8<sup>th</sup> April, 1941, 452 Squadron was the first Australian squadron to form in Britain during the Second World War, flying Supermarine Spitfires. It became operational on the 22<sup>nd</sup> May.

It operated from a series of airfields in south-eastern Britain, focusing on operations in the skies above occupied France and Belgium, where it escorted bombing raids and conducted sweeps to engage enemy aircraft. The squadron was also employed to conduct defensive patrols over Britain and the English Channel. During its first year of operations





452 Squadron established itself as one of the most successful squadrons in Fighter Command, destroying 62 enemy aircraft and damaging another 17. Its aircraft also severely damaged a German destroyer with a strafing attack mounted during the "dash" through the English Channel made by the German battlecruisers Scharnhorst, Gneisenau and Prince Eugen in February 1942.

Under orders to return to Australia, 452 Squadron withdrew from operations in Britain on the 23<sup>rd</sup> March 1942. It sailed for home on the 21<sup>st</sup> June, arrived in Melbourne on the 13<sup>th</sup> August and re-assembled at Richmond on the 6<sup>th</sup> September. The squadron began refresher training at Richmond with a motley collection of aircraft, its Spitfires having been commandeered in transit by the Royal Air Force in the Middle East.



452 Squadron returned to front-line service in January 1943. Re-equipped with Spitfires, it was based at Batchelor in the Northern Territory and joined 1 Fighter Group, defending Darwin. The squadron relocated to Strauss Airfield (Humpty Doo) in February and with the exception of a brief period in March 1943 when it was deployed to reinforce the air defences of Perth, it remained there, protecting Darwin, until 30 June 1944.

On 1 July 1944, 452 Squadron moved to Sattler (Bees Creek) in the Northern Territory. The protection of Darwin had been handed over to two Royal Air Force squadrons, allowing 452 Squadron to be employed in a ground attack role for the rest of the war. Initially, the squadron operated against targets in the Dutch East Indies from Sattler but in December 1944 it joined the 1st Tactical Air Force and relocated to Morotai in the Indies to support Australian operations in Borneo. The squadron's ground staff established themselves at the newly captured airfield on



Tarakan in May 1945, but the state of the actual landing field meant that it was not fit for the squadron's aircraft to arrive there until the end of June. They began operational sorties the very next day.

The squadron's last sorties of the war were flown on the 10<sup>th</sup> August 1945 and it disbanded on the 17<sup>th</sup> November 1945.

On that fateful day in June, while attacking a Japanese bomber over Darwin, Duncan's faulty aircraft caught fire and he was forced to leave the aircraft. The lever to open the cockpit canopy broke off and it was only after he battered it, with fire licking at his legs, that it came free. With the plane in a dive, he ejected and parachuted to the ground.

Suffering severe burns to his arm and knees, Duncan survived in the bush for days before being rescued. He had stretched his parachute over trees to provide shade from the NT blistering sun and to make it easier for the SAR people to find him. Three days after he'd parachuted from his aircraft, and existed on minimal supplies he had on his person, a fellow Spitfire pilot spotted the parachute and food drops were organised for him. A few days later, the Army arrived, on foot, to rescue him and get him back to Darwin. He was 24 years old at the time.

Colin Duncan continued flying Spitfires in the war, reaching the rank of Flight Lieutenant and was discharged in August 1945. He returned to live in Victoria where he played cricket for Victoria as well as running a successful building company. He died in 1992 from cancer, aged 73, leaving behind his wife and two daughters.

See a video of the incident [HERE](#)

Although the battle has for decades been marked in folklore, the whereabouts of the crashed aircraft has, until now, remained a mystery. In March of 2016, the wreck of Duncan's Spitfire was finally spotted in a remote part of the Litchfield National Park by a helicopter pilot, 73 years after the crash. The wreckage was confirmed by the RAAF and the site is now protected by the NT Heritage Act.

Seventy-six years since that fateful flight, Colin Duncan's grandson has visited the wreckage of his grandfather's plane for the first time.

The aircraft wreck is now protected under the Northern Territory Heritage Act. The remote location in Litchfield National Park, about 110 kilometres south of Darwin, means the Spitfire has remained undiscovered until recently and with the crash site immensely difficult to reach and only accessible by helicopter, the plan is to preserve the wreckage at its final resting place.







The RAAF has handed ownership of the wreckage to the Northern Territory Government in the hope it will help tell the story of Darwin's role in World War II. According to Air Commodore John Meier, the new find in the Top End outback is testament to the Darwin's often forgotten place in modern wartime history.

"We only had a few Spitfires in Australia and this one is of major significance because it was lost in the battle of Darwin," he said.

"If you compare it to Pearl Harbour, that everyone knows about, this is our Pearl Harbour and it's not particularly well known by the Australian population."



Will we ever see trains as clean as this again?

This is the interior of one of Brisbane's "old" trains which were introduced in 1979.

It looked brand spanking new.





## The amazing Maths inside the Rubik's Cube



Want to solve the puzzle? Then you have to know the numbers.

Back in 1974, Hungarian inventor and architect Erno Rubik designed the first Rubik's Cube. Ever since its release, it's taunted almost a half billion tinkerers who think they can crack the confounding cube, only to be stymied by its maddening secrets. As we approach the Rubik's Cube's ruby anniversary it's time to unpack the puzzle once and for all—with deep maths because while the cube's literal insides may be made of plastic, its real guts are nothing but numbers.

### Breaking Apart the Blocks

Starting with some basics, a 3x3x3 Rubik's Cube has six faces, each a different colour. The centre of each face is attached to the core scaffold that holds the cube together, so they don't move other than rotating in place. As a result, the same colours always end up opposite each other; on a standard cube, white is opposite yellow, red opposite orange, and blue opposite green.



Bust open a Rubik's Cube and you'll see it's made of three types of building blocks. First, there's that central scaffold, connecting the centre of each face. Then there are the cubies, the nickname for the little 1x1x1 blocks. The corner cubies have three coloured sides, and the edge cubies have two. A Rubik's Cube has one core, eight corner cubies, and 12 edge cubies.

The immediate maths to be done with those numbers is the total number of ways you can scramble a Rubik's cube: 43,252,003,274,489,856,000. Good luck!

Want to know how to do it, see [HERE](#).

Brisbane's Queen Street Mall, at lunch time on a week day.

Normally this Mall is full of people out shopping, lunching, strolling or just enjoying themselves.

Corona sure changed that!





## Israelis sleep easy at night.

Israeli's Phalanx Close-in air defense system (by Raytheon) engaging incoming missiles. This is part of Israel's "Iron Dome" defense system. There appear to be at least two high speed guns out of view of the camera, maybe more. At least 50 cal. or maybe 20 mm for the range they are shooting. The white can in the foreground appears to be for close-in fire, in the event the longer range guns do not do the job. All this is radar/computer controlled, no human action except to turn it on. What we are seeing are real shoot-downs, rockets launched probably from Lebanon aimed at Tel Aviv or other populated targets.

This is cutting-edge American technology. Click [HERE](#) to see it.

All very good - except it's a fake.

A video clip of rapid gunfire in the night sky has gone viral on social media with the claim that it is Israel's latest anti-missile defence system. The video shows bright streaks of light against the night sky with the sound of gunfire in the background. There are collisions in the sky and a trail of black smoke is seen, even as burnt-out projectiles drop to the ground. The video was posted by Facebook page Military GUNS' on September 13, 2019.

This is not an original video of any gunfire but a gaming video done with the help of computer-generated imagery (CGI). Many YouTubers have uploaded the same video with the same claim. Others have uploaded the video with a different claim. YouTube channel Public Interest News has uploaded the video with the caption, Russian anti-missile (S300 & S400) shooting down Israelis missiles in Syria.

Upon closely observing the video, one could easily make out that it is computer-generated imagery. Unlike real-life situations, the trail of black smoke vanishes too quickly in the sky. This is not a real video of Israel's anti-missile defence system, but part of a video game.

Pity - because it looks good!

## NSW - Qld Border.

After this epidemic has left us and is only a bad memory, one sight we don't want to see again is the restrictions on people entering Queensland from southern States. This was the scene on Saturday the 30 May 2020, Police were positioned on all roads leading into Qld and were stopping everyone from entering. If you didn't have an entry permit, an A4 size sheet taped to the inside of your windscreen (you got one [HERE](#)) you were turned around and sent packing.

We stopped and watched for a while - the Police were very polite about it all, there was no heavy handedness about it, but the whole episode was very third world - very sad to see. Cars were piled up around past the Twin Towns Services Club and well into NSW, all patiently waiting.





Funnily enough though, we were able to walk into NSW and back into Qld again (near the Club) without being queried - as did many others. Must be the cars that carry the disease. It's going to be interesting when Clubs in NSW open and those in Qld can't - there will be a steady stream of foot traffic over the boarder for sure.

## Vietnam re-visited.

(A lot of these pics were sourced from the AWM site.)



Electrical fitter Tom Van Dyken (left) supervises Ray "Luigi" Hanlon who is testing a Caribou aircraft's inverter which supplies AV power to various instruments. March 1966.





Electrical fitter, Allan Elliott of 35 Squadron, working on electrical components on one of the Caribous at Vung Tau - November 1966.

Allan was awarded a certificate of "Commendation for Outstanding Service" by the CO of the Squadron, Wng Cdr Charles Melchert, who made the presentation during a parade of the full complement of 35 Squadron, personnel.

The citation for the award reads:

*'Corporal Elliott demonstrated great devotion to duty and a high degree of professional skill in designing and manufacturing test equipment, at the same time as effectively supervising a large squadron electrical section. His initiative, inventiveness, and outstanding efforts have set a high standard example and improved the effectiveness of his squadron'.*



After my wife died, I couldn't even look at another woman for 10 years.  
But now that I'm out of jail, I can honestly say it was worth it.





Siebe Van-Stam, a crewman gunner with No. 9 Iroquois helicopter Squadron.



Peter Tickner, 9 Squadron, (Framie) is checking the hydraulic union on an Iroquois. June 1969.



Paul Covington, gunner, checking his weapon before an operation. Jan 1967.



Robert Oliver, (Framie) and Roger Wilde, (Sumpie).



Exterior view of the partially completed 9 Squadron, Airmen's Club, (1966) colloquially known as the 'Ettamogah Hotel' after the 'Australian Post' cartoon drawn by Ken Maynard. The sign was painted by Joseph Riches, an aircraft spray painter, known amongst squadron members as 'Joe the Painter'. Sticking out from the left-hand side of the tent is the bar, which has yet to be positioned. The 'Ettamogah Hotel' was established to provide a recreation facility separate from the 35 Squadron bar and was run on a volunteer basis, wherein rostered squadron members would stock the bar with beer, Pepsi soft drink and ice purchased with their own ration tickets from the base PX store. Patrons provided their own spirits and entertainment.







Unloading 9 Squadron helicopters from HMAS Sydney, at Vung Tau Harbour, South Vietnam, June 1966. Following the arrival of a 9 Squadron advance party on 3 May 1966, the squadron's UH-1B/Iroquois helicopters arrived in Vietnam in June 1966 aboard *Sydney* which anchored off Vung Tau. The following day, the aircraft were brought up from the hangar deck and had their rotor blades fitted before flying off the aircraft carrier. The squadron moved to Nui Dat at the end of the month. Operating out of Luscombe Airfield at Nui Dat, the Iroquois carried out a variety of roles in Vietnam; primarily the transport of infantry and logistic support, but the helicopters were also used to drop leaflets over enemy territory, conduct aerial spraying to rid the base of mosquitoes and to kill vegetative growth around the base and to destroy agricultural plots in Viet Cong territory, denying the enemy a source of food. The squadron was re-equipped with larger UH-1D Iroquois helicopters beginning in November 1966 following which the squadron worked in conjunction with aircraft of the RAN Helicopter Flight Vietnam and United States forces, transporting troops to and from patrols and evacuating wounded soldiers from the battlefield.



9 Sqn Troops arriving at Nui Dat (Luscombe field), waiting for the limos to take them to the motel.



Nui Dat, with Luscombe Airfield on the right. Luscombe Airfield was named after Lt Bryan Taylor Luscombe, the first Army pilot killed in the Korean War. Work on the airstrip was started soon after the Australians arrived at Nui Dat in June 1966.

Working on an Iroquois helicopter of 9 Squadron at Vung is Bruce Clark, (Sumpie) who is being assisted by trainee Vietnamese mechanic Tran Van Dao. March 1968.







Working on the engine of a 9 Sqn Iroquois is Ivan Ray Wescombe. April 1967.

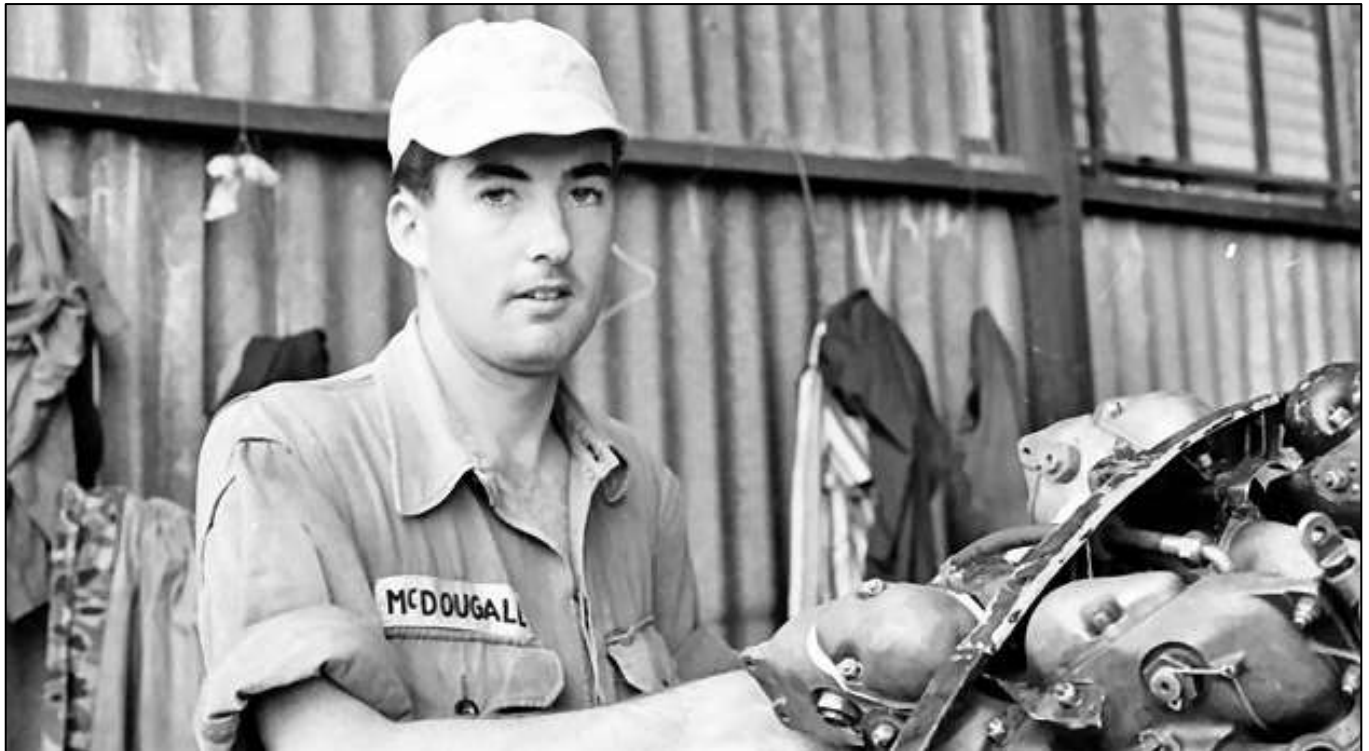


An aerial view of helicopters from No 9 Squadron, lined up on their flight line at Vung Tau. June 1966.





Sampling some of the local brew are L-R: Robin Gee, Douglas Bowie, Kevin Seckington, Ray Bessen, Wayne Darcy, John Florence and Kevin Devine.



John McDougall, "tinkering" with one of the engines off a Caribou. October 1966.



Stu Spinks, Caribou pilot, reading the letter from his girl friend back home, for the 20<sup>th</sup> time.



John McDougall, Sumpie, (seated on the left) and Ian Johnston, Radtech, being served cold drinks on the beach after work??. The villa occupied by the men is only yards from the delightful town (front) beach. A small kiosk along the beach provided refreshments and shady seats as well as friendly service for the Australians. October 1964.

What did you do in the war daddy??





Ian Taylor, boss of the radio section at 35 Sqn Vung Tau showing, what looks like a bit out of a foreigner, to a trainee. In August 1966, 35 Squadron were training young local Vietnamese men in trades associated with the aircraft industry. They were trained up to the stage of assistant to an Australian tradesman and sometimes after they have had 12 or 18 months training, they would leave to join the Vietnamese Army or civil airlines. After Vietnam, Ian returned to Australia and took over 38 Sqn radio section.







The late [Peter Mansfield](#), (Framie) of 35 Squadron, shows Vietnamese lad Pham Thai points to look for in fitting a wheel to the undercarriage of a Caribou aircraft, in the hangar at Vung Tau.



Len Grinham, (Sumpie) shows Vietnamese Nguyen Van Thu, how to fit spark plugs into a Caribou aircraft engine at the maintenance section of Vung Tau Airfield.



Douglas Ellacott (Sumpie) of 35 Sqn, shows Peter Davidson, (9 Sqn pilot) how to pull a cylinder off a Caribou engine.



Colin Knudson (Framie) of 35 sqn shows some hydraulic bits from the Caribou to Hoang Nam.



Loady doing preflight.



An aerial view of the new No 5 Airfield Construction Squadron (ACS) hangar in June 1966. The huts in the background are the headquarters of the various RAAF squadrons operating out of Vung Tau, South Vietnam. The hangar later became the maintenance workshop for No 9 Squadron and No 35 Squadron.





Warren Churchin, (Framie) with No 35 Squadron and David Darcey, 9 Sqn crewman and gunner, inspecting the wheels of a Caribou. Dave Darcey carries his issue 9mm pistol in a 'wild west' holster he bought in Vung Tau. Many of the crewmen bought this type of holster to take back to Australia as souvenirs.





35 Squadron, Engineering Officer, Herbert (Wally) Solomons, and the CO Charles Melchert, inspecting the crashed Caribou for the extent of damage and to make a list of the parts required to make it airworthy.

Got an e-mail today from a "bored housewife 32, looking for some action!"  
I've sent her my ironing, that'll keep her busy.



The late [Keith Bosley](#), (Loady) hands a Montagnard woman a teddy bear from a collection of toys sent to 35 Squadron by Support Command Headquarters. The Montagnards gathered around the Caribou after it landed at Plei Mrong Airfield with ammunition for the Special Forces Camp based.



Welfare boats at Back Beach.





Main Street, Phan Rang, 1966.



2 Sqn HQ, Phan Rang, 1971.



Rolf Aronsen CO 2 Sqn, and Dave Ingll (April 1967).



**Standing L-R:** Ian Dainer, Barry Oliver, Graham Maher, Laurance Kuchel.  
**Front L-R:** Noel brown, Greg Ewan, Ian Simkinson, Phil Crisp. (1971)





Peter Herbert and Kevin Conner in the tape-recording centre at Phan Rang Air Base, Vietnam. The USAF provided the tape centre as an amenity for the many airmen who have tape systems and it enables them to build up a library of taped music.



“Home” for the blokes who kept Phan Rang’s Canberras flying. The blokes at Vung Tau enjoyed similar facilities as those at Phan Rang - facilities that Army blokes at Nui Dat could only dream of.





The "Koala Bar" – the Airman's club for blokes at Phan Rang. Dec 1970.



2 Sqn Sumpies on a D service.



Pilot, FO David Smith, and navigator, FO Peter Murphy, stand next to their Canberra on which is loaded the last bomb dropped by No. 2 Squadron in Vietnam. The bomb was painted white and the armourers had printed in red the words "76,389<sup>th</sup> and last bomb compliments to Charlie from RAAF No. 2 Squadron RAAF UC Dai Loi".

Murphy was given the honour of flying the squadron's final mission as his 310 Vietnam missions with No. 2 Squadron was the Squadron's highest number of Vietnam missions.

Growing up with a dyslexic father had its advantages.  
Whenever he caught me swearing, he used to wash my mouth out with soup.





A RAAF Squadron Leader hosing down members of 2 Squadron, who have climbed aboard the Canberra to celebrate its return to Phan Rang it had completed the Sqn's last bombing operation in Vietnam.



The opera house in the Australian quarters at Phan Rang. This structure was used to screen movies to the RAAF personnel at night.





2 Sqn dongas.



2 Sqn personnel, March 1971.



Ken Marks – radio, 2 Sqn Phan Rang, April, 1971.



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Veterans and Veterans Families Counselling Service (VVCS) can be reached 24 hours a day across Australia for crisis support and free and confidential counseling. Phone 1800 011 046.  
VVCS is a service founded by Vietnam Veterans.



## Health and Life-Style

### Gin and the Corona Virus.

As most of us were aware, during the height of the epidemic, Hydroxychloroquine took the world by storm. Every newspaper talked about it, and all countries requested India to supply it.

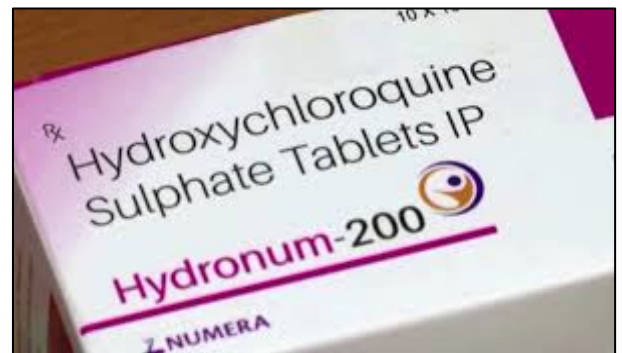
Now, a curious person might wonder why and how this chemical composition is so deeply entrenched in India, and is there any history behind it.

Well, there is an interesting history behind it which goes all the way back to Tipu Sultan's defeat. In 1799, when Tipu was defeated by the British, the whole of the Mysore Kingdom with Srirangapatnam as Tipu's capital, came under British control. For the next few days, the British soldiers had a great time celebrating their victory, but within weeks, many started feeling sick due to Malaria, because Srirangapatnam was a highly marshy area with a severe mosquito trouble.

The local Indian population had over the centuries, developed self-immunity and also all the spicy food habits helped to an extent, whereas the British soldiers and officers who were suddenly exposed to harsh Indian conditions, started bearing the brunt.

To quickly overcome the mosquito menace, the British Army immediately shifted their station from Srirangapatnam to Bangalore (by establishing the Bangalore Cantonment region), which was a welcome change, especially due to cool weather, which the Brits were gravely missing ever since they had left their shores, but the malaria problem still persisted because Bangalore was also no exception to mosquitoes.

Around the same time, European scientists had discovered a chemical composition called "Quinine" which could be used to treat malaria and which was slowly gaining prominence, but it





was yet to be extensively tested at large scale. This malaria crisis among British Army came at an opportune time and thus Quinine was imported in bulk by the Army and distributed to all their soldiers, who were instructed to take regular dosages (even to healthy soldiers) so that they could build immunity. This was followed up in all other British stations throughout India because every region in India had malaria problem to some extent.

But there was a small problem. Although sick soldiers quickly recovered, many more soldiers who were exposed to harsh conditions of tropical India continued to become sick, because it was later found that they were not taking their dosages of Quinine. Why? Because it was very bitter!! So, by avoiding the bitter Quinine, British soldiers stationed in India were lagging behind on their immunity, thereby making themselves vulnerable to Malaria in the tropical regions of India.

That's when all the top British officers and scientists started experimenting ways to persuade their soldiers to strictly take these dosages and during their experiments, they found that the bitter Quinine mixed with Juniper based liquor, actually turned somewhat into a sweet flavour because the molecular structure of the final solution was such that it would almost completely curtail the bitterness of Quinine.

That juniper based liquor was Gin and the Gin mixed with Quinine was called "Gin and Tonic", which immediately became an instant hit among British soldiers.

The same British soldiers, who were ready to risk their lives but couldn't stand the bitterness of Quinine, started swearing by it daily when they mixed it with Gin. In fact, the Army even started issuing a few bottles of Gin along with "tonic water" (Quinine) as part of their monthly ration, so that soldiers could themselves prepare Gin and Tonic and consume them every day to build immunity.

To cater to the growing demand of gin and other forms of liquor among British soldiers, the British East India company built several local breweries in and around Bengaluru, which could then be transported to all other parts of India. And that's how, due to innumerable breweries and liquor distillation factories, Bengaluru had already become the pub capital of India way back during British times itself. Eventually, most of these breweries were purchased from British organizations after Indian independence, by none other than Vittal Mallya (Vijay Mallya's father), who then led the consortium under the group named United Breweries headquartered in Bengaluru.

Coming back to the topic, that's how Gin and Tonic became a popular cocktail and is still a popular drink even today. The Quinine, which was called Tonic (without gin), was widely prescribed by Doctors as well, for patients who needed cure for fever or any infection. Whenever someone in a typical Indian village fell sick, the most common advice given by his

**GIN & TONIC WAS INVENTED TO COMBAT MALARIA IN THE JUNGLES OF BRITISH INDIA.**

**Soldiers were made to drink water mixed with quinine, which is an anti-parasitic tree bark extract.**

**The gin helped mask the awful bitter taste.**

**Modern tonic water is still made with small amounts of quinine.**



neighbours was "Visit the doctor and get some tonic". Over time, the tonic word was so overused that it became a reference to any medicine in general, so, that's how the word "Tonic", became a colloquial word for "Western medicine" in India.

Over the years, Quinine was developed further into many of its variants and derivatives and widely prescribed by Indian doctors. One such descendent of Quinine, called Hydroxychloroquine, eventually became the standardized cure for malaria because it has relatively lesser side effects compared to its predecessors, and is now suddenly the most sought after drug in the world today.



## Why Do People Faint?

## Pocket Hits

Most of the time, different parts of your nervous system work in balance, but sometimes things can get out of whack.

What's happening in your body if you're feeling faint. Maybe it's a bride standing in a hot chapel, or an exhausted runner after a race. It could be someone watching a medical procedure on television or a donor at a blood drive. Maybe you've even experienced it yourself. You start to feel lightheaded, your stomach may hurt, your palms are sweaty, your vision closes in, your ears start to ring .... Then you wake up on the floor, staring up the ceiling, and realize you've fainted.

What happened?





Fainting, or what medics more technically call syncope, can be caused by a number of factors. Ultimately it comes down to not enough blood getting to your brain. Sufficient blood pressure is necessary in order to deliver blood and therefore oxygen, to all of the tissues in your body. The brain, which when you're sitting or standing is above the level of your heart, especially relies on sufficient pressure to overcome gravity and drive blood up to your head.

So what can interrupt that process and cause you to hit the deck before you even know what's going on?



The vagus nerve helps carry out a number of unconscious actions as part of the autonomic nervous system. By far the most common trigger for fainting is a drop in blood pressure due to a strong vasovagal response. This reflex is named after the vagus nerve, which runs from your brain to your heart, lungs and digestive tract.

The vagus nerve's job is to regulate your parasympathetic nervous system. This is one half of your autonomic nervous system, all of which works without your needing to think about it. The parasympathetic functions are often characterized as rest-and-digest. For example, in the heart, the vagus nerve releases a neurotransmitter called acetylcholine. Acetylcholine binds to special pacemaker cells to slow the heart rate down. Behaviours such as deep, slow breathing during yoga try to increase parasympathetic activity, slowing the heart and leading to a more relaxed state.

While relaxation is a good thing, slowing the heart down too much is not as when it leads to a brief loss of consciousness. You need your heart rate to be a certain number of beats per minute in order to contribute adequately to your overall blood pressure.

The other half of your autonomic nervous system is the sympathetic nervous system. It's responsible for the fight-or-flight response, the functional opposite of the parasympathetic nervous system. The sympathetic nervous system makes sure the small blood vessels in your

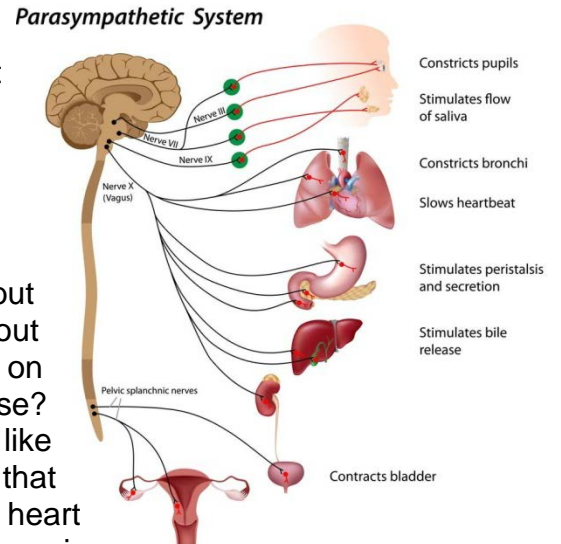


body's tissue maintain a baseline level of constriction. This resistance as blood flows through all your narrow blood vessels contributes to sufficient blood pressure for the whole system. An increase in parasympathetic activity reverses this resistance, allowing blood to linger in the peripheral tissues rather than heading to the heart and brain. A lack of resistance, along with the lowered heart rate, causes a dramatic decrease in blood pressure.

And you've fainted, or more technically, experienced a neurocardiogenic syncope. While sometimes embarrassing, it's fairly common and, in itself, not overly dangerous.

### When a Sight or Sound is the Trigger.

The physical causes of fainting make logical sense, but there's some psychology involved here, too. Think about someone who faints at the sight of blood. What's going on there that can lead to this overactive vasovagal response? Typically, when the body senses an initial stress, like seeing blood, it triggers a fear-filled response that increases sympathetic nervous system activity and the heart rate rises. The body reflexively compensates by increasing parasympathetic activity to slow the heart rate back toward normal. But if the parasympathetic system overcompensates and lowers the heart rate too much, blood pressure can decrease too much, the brain gets less oxygen and down you go.



Whatever the cause of the fainting spell, the loss of consciousness is typically brief; most people will come to immediately after hitting the floor or even slumping over in a chair. In this sense, some researchers have suggested that fainting is protective. Once lying down, there's no longer a gravitational challenge in delivering blood to the brain, it's now at the same level as the heart, and, if one were actually haemorrhaging, or losing blood, the lying down, motionless posture would preserve blood and reduce further injury. The process of going from standing or sitting to lying on the floor is actually one of the more dangerous aspects of fainting, though. Individuals may hit their head or other body parts on the way down, causing injury.

The idea that fainting may be related to the potential for blood loss, rather than a response to needles themselves or a medical procedure in general, has been a topic of recent investigations. In one study of healthy people, watching a video of a blood draw led to slightly greater activation of the parasympathetic response than did watching a very similar video of an injection, suggesting there is something special about the blood itself. This same research group has also shown that, if a person believes they are able to stop the procedure at any time, vasovagal symptoms can be minimized. This suggests the feeling of fear or lack of control may contribute to the severity of people's responses. All the different causes for fainting and all the various reasons one person might be predisposed remain unclear, although it's well accepted by scientists that females are more likely to experience syncope.



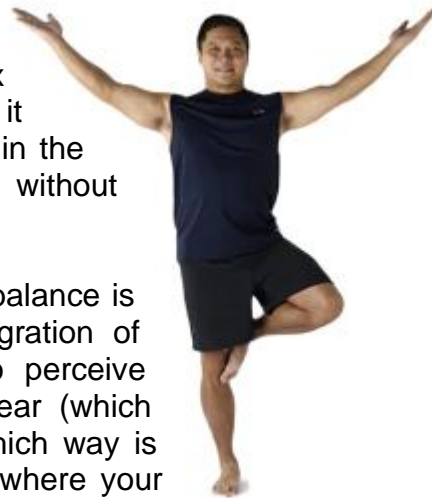
## What are some of the strategies that can help prevent fainting?

- Undergo procedures lying down in the supine position. If you do feel faint, bend your knees or elevate your legs to facilitate blood flow to your brain.
- Contract the muscles in your arms and legs to help move blood back to the heart and brain.
- Stay well hydrated to maintain sufficient overall blood volume.

Remember that an occasional episode of vasovagal syncope is likely not of concern, as long as you haven't been injured in the process, but if fainting occurs repeatedly, it's worth scheduling a medical exam.

## Balance.

As you get on a bit, you gradually lose a few things, hair, smooth skin, the ability to get up off the floor, eye sight, sex appeal and for some unknown reason - balance. Where once it was good fun and as easy as pie to walk along the cracks in the footpath, as you age it's hard to just walk a straight line without getting the wobbles.



We all need balance in our lives. Literally. But having good balance is more complex than you may realize. It involves the integration of various sensory and motor systems, including: vision (to perceive direction and motion), the vestibular system in the inner ear (which monitors motion and provides orientation clues, such as which way is up) and what's called "proprioception" (the ability to sense where your body is in space). To stay steady, you also need good muscle strength and reaction time.

If any of these systems are not functioning properly, you can lose your balance even while just walking or standing up. In fact, about one in three people over age 65 (not living in nursing homes) fall at least once a year and 10 to 15 percent of these falls result in serious injury. Falls, of course, are a major cause of fractures, which increase as people get older. Older people often have poor balance due to loss of muscle strength and joint flexibility, as well as reduced vision and reaction time and the risk of inner ear dysfunction, which can throw you off balance.

Lack of exercise, alcohol, obesity, neuropathy (nerve damage) in the lower legs, certain drugs or medical conditions, even wearing the wrong glasses, can also interfere with balance, at any age.

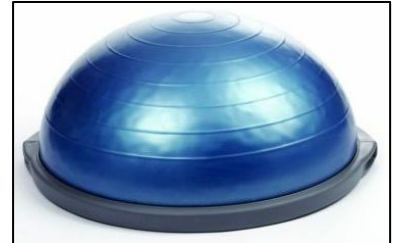
Exercise, such as brisk walking, running and strength training, helps improve balance. Any activity that increases strength, especially in your lower limbs, as well as agility, is worthwhile. Even golf, aquatic exercise, interactive dance video games, and Feldenkrais (a movement therapy) have been shown to help.





Below are some other good things you can do for your balance. The equipment needed is available at sporting-goods stores or online; gyms and physical therapy offices may also sell it. Before you start: If you have serious balance problems, it's a good idea to begin with a trainer at a gym or a physical therapist. At home, be sure to have someone "spot" you or at least have something to hold onto so you don't fall.

**Balance on a board:** Also called wobble or rocker boards, balance boards are wooden or plastic devices that sit on a short base that acts as a fulcrum. By shifting your weight from side to side or front to back, you try to balance without rocking too much. For more of a challenge, do it with your eyes closed. Boards cost about \$20 to \$60 (or more, for a "professional" one). A bosu ball is also good.



**Walk on cobblestones:** Chinese tradition holds that walking on uneven paths is good for balance. A study at the Oregon Research Institute gave support to the practice. It found that healthy but sedentary older adults significantly improved their balance by walking on special cobblestone mats. Aim for half an hour of cobblestone walking two or three times a week, in addition to regular walking and strengthening exercise. If you have no cobblestone paths in your neighbourhood, you can buy long walking mats like those used in the study for about \$50.

**Have a ball:** Made of vinyl and filled with air, a large exercise ball (also called a stability ball or physioball) is another handy helper for improving balance. At home, be sure you have plenty of room so you don't tumble onto a piece of furniture. The balls come in different sizes (based on your height); most cost about \$15 to \$30.



**Try a mini-trampoline:** Training on a mini-trampoline for 14 weeks increased balance in a study published in the Journal of Electromyography and Kinesiology in 2011. After participating in the program, older people were better able to regain their footing in a forward fall experiment—an ability that can help prevent a serious injury in real life. If you are very unsteady on your feet, though, this may not be a good choice. Mini-trampolines cost about \$40 to \$80; some have handrails.

**Bottom line:** If you are over 60, ask your doctor to check your sense of balance. There are many ways to improve your balance and thus reduce the risk of falls. Find what you like but also mix it up.

Another thing to consider for fall prevention is a vitamin D supplement. Studies suggest that adequate vitamin D reduces the risk of falls by increasing muscle strength in the legs. The recommended daily intake is 600 IU up to age 70 and 800 IU for those older, but we recommend 800 to 1,000 IU a day for most people. People who are deficient may need higher doses.

## Sex Life





Many men yearn for a better sex life, at least if the growing number of ads and websites promoting performance-boosting supplements is any measure. The formulas go by names such as ExtenZe, Stay Erect, X-Rock, Endowmax, Enzyte and ArginMax. Some are marketed as “natural alternatives” to Viagra (sildenafil) and other drugs used to treat erectile dysfunction, the repeated inability to have and/or maintain an erection sufficient for sexual intercourse. Others make vaguer claims about improving sexual performance (“drive women wild in bed”) or none-too-subtle promises about enlarging penis size.

An erection depends on many factors, including blood supply, hormones and nerve and muscle tissue in the penis. Some ingredients found in the supplements are supposed to affect these factors, and in a few cases there’s a theoretical basis for a possible benefit. But most products contain a witch’s brew of ingredients that range from dubious to outright dangerous. The labels often don’t tell you exactly what’s inside, and rarely in what amounts. Even if they do tell you, they may not be accurate.

Here are some common ingredients marketed as sexual performance boosters.

**Arginine:** This amino acid, one of the building blocks of protein, enhances the effects of nitric oxide, a chemical that improves blood circulation in the body. Nitric oxide also relaxes blood vessels and smooth muscles in the penis, thus producing erections. This is also what erectile dysfunction drugs do, but it’s unknown whether enough of the supplemental arginine gets into the penis to make a difference. Indeed, some studies have found little or no improvement compared to a placebo.



**Ginseng:** Long regarded as an aphrodisiac in Asia, this herb is claimed to improve erections by dilating blood vessels and affecting nerves involved in erections. A big problem with ginseng is its great variability. Not only are there several types, which have different compounds and biological properties, but different parts of the plants are used and these also contain varying compounds. Preliminary research suggests that Korean red ginseng may improve erectile dysfunction; other forms may not have this effect.



**Prohormones:** Many prohormones (hormone precursors), which are supposed to boost testosterone, are marketed as sex drive enhancers as well as muscle-building aids. In 2005, U.S. federal law banned over-the-counter sale of 25 of these compounds, including androstenedione, because of serious risks. These are now controlled substances, like anabolic steroids. Marketers have wiggled around the law, however, and produced other “natural testosterone boosters.” Two are DHEA (dehydroepiandrosterone) and the herb Tribulus terrestris. It’s unclear how effective any of these are, if at all. If they do act like testosterone or affect other hormones, they could have serious long-term adverse effects.

**Yohimbe:** Made from the bark of a West African tree, this has been used as an aphrodisiac for centuries. In pre-Viagra days, it was sometimes prescribed to treat erectile dysfunction. A standardized extract is still available by prescription, though little used today. Yohimbe dilates blood vessels and increases blood flow, and thus may improve erections. It has been shown to increase sexual arousal in rats, but has had mixed results in human studies. Side effects include a boost in blood pressure, abnormal heart rhythms, nausea, anxiety and sleeplessness.



Because of safety concerns and the variability of the active ingredient, yohimbe should not be used.

Cocktails of ingredients: Many supplements contain a wide range of herbs traditionally used as aphrodisiacs—from ginkgo, deer horn and horny goat weed (we kid you not) to damiana, maca, muira puama (meaning “potency wood”) and an array of vitamins and minerals, but there is little or no solid scientific evidence for any of them. Manufacturers often say they have studies to support their claims, but these are almost always unpublished, involve rodents or isolated cells, or are of poor quality. For instance, they usually don’t test the products against a placebo.

A few years ago, the US Food and Drug Administration (FDA) warned consumers not to use a variety of sex supplements because they were illegally laced with the active ingredients in drugs like Viagra. These compounds can interact with other medication and can be dangerous for people with certain conditions, and thus should be sold only by prescription and used under doctor supervision. The products were reformulated or taken off the market, but no one knows how safe the replacements are.



Bottom line: Supplements that are supposed to turn you into a tiger in bed are countless. Don’t fall for the claims. The side effects are largely unknown, especially when the ingredients are combined and taken by older men with existing medical conditions. In particular, experimenting with hormones, or anything that affects them, is always risky. If you have erectile dysfunction or other sexual problems, consult your doctor, not the salesperson at the health-food store or at a website.

## What are the risks of sitting too much?



Obviously, when you sit, you use less energy than you do when you stand or move. Research has linked sitting for long periods of time with a number of health concerns. They include obesity and a cluster of conditions, increased blood pressure, high blood sugar, excess body fat around the waist and abnormal cholesterol levels, that make up metabolic syndrome. Too much sitting overall and prolonged periods of sitting also seem to increase the risk of death from cardiovascular disease and cancer.

Any extended sitting, such as at a desk, behind a wheel or in front of a screen, can be harmful. An analysis of 13 studies of sitting time and activity levels found that those who sat for more than eight hours a day with no physical activity had a risk of dying similar to the risks of dying posed by obesity and smoking, however, unlike some other studies, this analysis of data from more than 1 million people found that 60 to 75 minutes of moderately intense physical activity a day countered the effects of too much sitting. Another study found that sitting time contributed little to mortality for people who were most active.





More study is needed on the effects of sitting and physical activity on health, however, it seems clear that less sitting and more moving overall contribute to better health. You might start by simply standing rather than sitting when you have the chance or finding ways to walk while you work. For example:

- Take a break from sitting every 30 minutes.
- Stand while talking on the phone or watching television.
- If you work at a desk, try a standing desk — or improvise with a high table or counter.
- Walk with your colleagues for meetings rather than sitting in a conference room.

The impact of movement, even leisurely movement, can be profound. For starters, you'll burn more calories. This might lead to weight loss and increased energy. Also, physical activity helps maintain muscle tone, your ability to move and your mental well-being, especially as you age.



## Arthur's Articles.

### On to Ballarat

The night before we left Rathmines, all course members held an unofficial ceremony. I will explain one of the oddities of our time at Rathmines. The hotels in New South Wales closed at 6 p.m. daily and the drinking age in New South Wales was 18 years old, unlike Queensland where it was 21. As youths were able to join the Air Force at age 17, there had to be a local distinction in NSW whereby a 17-year-old could not enter a hotel bar while an 18-year-old could.

The powers that be had devised a remarkably simple method of recruits wearing a white tab on their epaulettes. 3 inches long and a half an inch wide would indicate an 18-year-old and over, while the 17-year-old recruit would wear a strip a quarter of an inch wide. The instruction was that these white strips would be sewn on to the epaulette. Some smart recruits found that white sticking plaster would do the same trick, so that they could leave the base in uniform, then rip off the sticking plaster, replacing it before appearing in 'drabs' on the base on the next occasion they wore formal 'drabs' uniform.

I was away from the Rathmines Base one day in uniform, when I heard a fellow recruit being asked what did the white stripe represent? Bold-faced, he replied that he was a helicopter pilot.

The unofficial ceremony consisted of unpicking the white tabs and discarding them for ever.



*Accommodation Huts at RAAF Base, Ballarat*

Course members spread to the four corners of Australia, some to never be seen again. Fred, who I had travelled down from Brisbane to Awaba with, and a fair gaggle of our course, headed off to Wagga Wagga to commence their technical training. The two Peters who had been with the PMG's Department who also came down with Fred and me and one other who came in to the Air Force as a Surface Finisher as his brother had done some years before, boarded the Spirit of Progress for an overnight trip to Melbourne, again, not in a sleeper.

After an uneventful trip, we arrived in Melbourne and hung around Spencer Street Station until the

Overlander left that afternoon for Adelaide. We three were only going as far as Ballarat. We arrived at Ballarat Station about 5 p.m. that afternoon and as we disembarked from the





Overlander, we were struck with the coldest blast that I had ever experienced. We stood there shivering until the RAAF truck arrived to convey us back to the Base.

Ballarat Air Base was a collection of old-World War Two huts which had been hastily established during the war to provide Wireless Air Gunners for duties throughout the war theatres. Decentralised Wireless Air Gunner schools had been brought into Ballarat in 1942 to complete this task. 1WAGS was the forerunner of Radio School which taught all radio associated trades, from aircrew Signallers to Tels Ops, Telegraphists, Sigs Ops, Telephone Ops, Radio Mechanics, Radio Technicians, Comms Ops and Comms technicians. If a job required training in the radio ops or repair field, that training was undertaken at RAAF Base Ballarat.



*Married Quarters at RAAF Base, Ballarat*

We were given our sleeping quarters that night, and at least, we escaped from the chilling blast of Antarctic wind that had welcomed us to Ballarat.

The following morning, we had to complete the usual rigmarole of being admitted to a new unit by walking all over the base to complete our inward clearances, but we did receive an impression of how large and spread out our new home really was.

As with Rathmines, Day Three saw us attend the 'Poolies Parade'. As our radio mechanic course was not due to start until the New Year of 1961, we had to occupy ourselves through the various tasks thrown at the 'Poolies'. Along with five other 'Poolies', I was assigned to the Carpenter's Shop. That suited me fine, as I had gone to East Brisbane State School during my primary school days at Camp Hill State School to do Manual Training, and I liked working in wood and in that environment. In fact, I saw it as a step up from the Officers' Mess Kitchen and the Boiler rooms tasks I had as a 'Poolie' at Rathmines.



*If only our golf net was 10 feet by 7 feet!*

An AC Carpenter, Rod Dell, had recently completed recruit course and Ballarat was his first posting into the 'real world' of the RAAF. Every morning, Rod would take his five 'Poolies', eager to do a days' carpentry, out into the back blocks of the Base where a golf hitting net had been created, ostensibly for the Commanding Officer, Wing Commander Fairbanks, to practice his golfing drives.

The 'net' consisted of chicken wire being strung between two disused telegraph poles, some thirty yards apart, with hessian affixed to the chicken wire. You'll remember I had already noted the cold chills that greeted me in Ballarat, well, this practice net was strung up in the wide open space





where the winds that blew across the Western Plains of a night, caused havoc to the hessian resulting in its total wreckage by morning. As we arrived each morning, the destruction from the night before would be evident and hessian flapped wildly in the wind from every section of the previous night's wholesome work. Every day, we would climb ladders and re-affix the hessian to the chicken wire and by the end of the day, the golf net would be in excellent condition.

The following morning, we would be greeted with the hessian flapping in the wind and once again, we would brave the chilly elements to return the golf net to its immaculate wholesomeness.

This ritual lead me to saying in exasperation that when I get to Heaven when this life is done, I am going to seek out Wing Commander Fairbanks and ask him if he ever practised his golfing swing while he was at Ballarat. I have a dreadful feeling that Rod Dell and we five 'Poolies' were simply pawns in the 'let us find something to keep these 'Poolies' occupied' conspiracy!

Christmas arrived, and I took leave to return home to Brisbane. I never gave a thought to who would repair the Commanding Officer's golf practice net each day over the Christmas break, and I guess he never had a chance to practice his golf swing.

On our return to Ballarat, our course started in earnest. We had to complete the theory phase before we split our class in two and some were arbitrarily channelled to the 'Air' phase while the others were channelled to the 'Ground' phase. We



Eureka Stockade Monument

also saw several of our classmates fail a theory phase and were re-mustered to another suitable trade. Generally, those who failed before Phase 3, were immediately re-mustered to General Hand, while those who made it past Phase 3, had a choice. Some selected Telegraphist, and one selected Medical Orderly.

Ballarat was a beautiful town, and once school was over for the week, and we had some free time to ourselves. We managed to do a bit of sight-seeing, together. Ballarat was famous, or infamous, for the revolt by miners which culminated in the erection of a

monument east of Ballarat at Eureka Stockade. This was a must for all visitors and dutifully, we trainee mechanics from School of Radio included the Eureka Stockade in our itinerary of local sight-seeing.

When Melbourne hosted the Olympic Games in 1956, the rowing events were held in Ballarat at Lake Wendouree, which along with its Begonia House and Avenue of Australian Prime Ministers, was a 'must see' tourist attraction both in 1961 and later when my family and I were posted to Melbourne Units as well as very unit in Point Cook except for the Institute of Aviation Medicine in later years.

In those days, Ballarat still had trams, as did Bendigo. Gliding relatively silently through the main street of town, Sturt Street, they would slowly make their way out to the then far flung suburbs of Ballarat, such as Sebastopol. Sadly, there were no trams or any public transport that ran out to the RAAF Base some seven kilometres from the centre of Ballarat.



I remember one weekend walking the long walk from our living quarters down to the main gate in the hope of hitching a ride into town. As I walked with a classmate, David Kingsley King, who hailed from Tasmania, he said to me that he was committed to the long haul and had signed up for twelve years, whereas, unlike me, I showed no commitment to my new career in that I had only signed up for six years. I ignored his logic to prove himself more committed than me and continued walking. David did stay for the long haul, being commissioned as a Radio Officer some years later.



*A Ballarat Tram of the 1960's*

From my civilian days and you could say, since my childhood, Sunday was a day for attending church. Once I bought my 'wheels', a 1958 Morris Major sedan, I found my way to the nearest Baptist Church in Dawson Street. It was a magnificent example of Gothic architecture.



*Dawson Street Baptist Church, Ballarat*

Sadly, sometime after I was stationed in Ballarat, the Baptist Church was sold, and the building became a restaurant and a night club before falling into disrepair. In 2009, the Victoria Heritage Society obtained the building and began painstakingly restoring it to its former glory. Of the once beautiful church buildings belonging to the Baptists, the Congregationalists, and the Methodists, that straddled the Dawson Street precinct, only St. Patrick's Roman Catholic Church remains as a worship centre today.

Back in the 1960's, many younger people including many trainees from the Radio School, attended "St. Pat's" on a Saturday night, not for a religious service but "St. Pat's" held the largest and most successful dance in town.

I guess because of my evangelical background of my family, it was natural for me to invite friends I had made along to church. I invited one of my fellow trainees at Radio School to join me one evening. After the service, as we were leaving, the minister shook my friend's hand vigorously and enquired of him, "Are you living by the Lord, Brother?" My friend, not understanding the question that laid behind his innocuous question, was put on the spot, and blurted out, "I suppose so!" The minister went into an ecclesiastical outburst of joy and exclaimed, "Hallelujah, Saints be praised. Hallelujah!" As we moved outside the church, my friend said to me, "What did he say?" I responded, "I'll tell you when we get home!"

RAAF Base Ballarat had once been an airfield, known as the Ballarat Aerodrome, which boasted several runways. So well-kept were those runways that motor races were held there from the early 1950's with the last race, the International Formula Libre race held in February 1961, which was attended by some European Formula One teams, BRM factory drivers Dan Gurney and



Graham Hill. Bales of hay were placed all around the airfield to identify the course, as well as cushion the impact of any race cars that moved off the main race way.



*A BRM Similar to Those That Raced at Ballarat*

Crowds thronged into RAAF Base Ballarat for that last meeting. Several visitors availed themselves of the services provided by the Airmen's 'Boozer', which was crowded after the racing finished for the day on the Saturday.

Many other visitors availed themselves of our amenities, including our ablution blocks. I remember about 7.00 p.m. that night, word went through the blocks that female visitors were availing themselves of our communal showers, all without dividing partitions.

Rumour is that there was a sudden urge by trainees remaining on base to suddenly clean their teeth. The number trying to gather around the sinks and the length of time it took to clean their teeth, Radio School members must have had the whitest teeth on earth that night! (Sorry, no photos of that segment available!)

Rumour is that there was a sudden urge by trainees remaining on base to suddenly clean

Several radio trainees pulled an extra guard duty that Saturday night, to protect the valuable machinery that was stored in one of the disused hangars. I pulled a midnight to 2.00 a.m. shift. I can remember my time on guard duty meant hanging around the front of the hangar that stored these racing cars. I thought how futile it would be if someone did attempt to enter the hangar as I did not even carry a truncheon! "Hey, you, put that racing car back where you found it," is about all I could challenge a potential thief with.

Just at the end of my shift, I saw my friend coming down the road to the hangar, the friend who I had taken to church that time, so I walked away from the front of the hangar towards him. We chatted for a few minutes about how quiet it was. He took up his post and I returned to the guard house.

While my friend was on his shift, a mobile RAAF Police patrol came across a BRM pushed into some hay bales. Later, in the guard house, it was learned that some drunken visitors, (it would never have been Radio School students ??) after a night in the Airmen's Boozer, decided to take a racing car for a spin around the circuit. They purloined a BRM, pushed it out of the hangar, (I believe it was Graham Hill's BRM,) but when they could not get it started, they ditched it into a bale of hay.

The Service Police came into the guard room and said that if they had started the BRM, the culprits could have killed themselves. Inquisitive me had to ask, "What time do you think it was stolen?" The reply: "Somewhere between midnight and 2 a.m." Oh dear, that means it was stolen right from under my nose!

The culprits were never caught, and Graham Hill and Dan Gurney raced on the Sunday without any further incidents. That night, we re-gained our ablution blocks; the Airman's boozer returned





to its normal occasional patrons and the last race day at Ballarat closed a very unusual chapter in the life at RAAF Base Ballarat.

Classes continued, several more classmates having failed the regular tests, were shown a different career path in the RAAF. When the theory phase had finished, the class was split into 'Air' and 'Ground' subjects, one concentrating on equipment found in all types of aircraft and the other ground, which concentrated on all types of equipment found at Base Radio Sections. I was appointed to the 'Air' group while my mate who had accompanied me, once, to church, was put into the 'ground' class.

In mid-March, the announcement was made that the whole School was to move to Laverton. (It was then I found out that my information giver at the Brisbane Recruiting Centre was totally wrong, and that Laverton was not in Western Australia, but just outside Melbourne alongside the Melbourne to Geelong Highway.)

Classes ceased, and all trainees were allotted to cleaning up, packing up and other tasks related to the big move. Concurrent with this announcement was one that told us that the RAAF was going to have a farewell parade to the City of Ballarat as well as provide a farewell concert by the RAAF Central Band to say goodbye to the citizens of Ballarat at the Civic Hall.



A call was made for those who had a singing voice to volunteer for the choir that would perform in this farewell tribute alongside the RAAF Central Band. There was a student on a course earlier than mine, Errol Kiely, who had sung with me in the Camp Hill State School Choir. In fact, in 1954, Errol was chosen to conduct the Junior Boys' Choir at an Eisteddfod in Brisbane. I was chosen as his under-study in case he could not fulfil the position on the day, but I did have to take my turn in swinging the baton just in case. In the event, Errol kept well, and my claim to fame is that I sang in that Junior Boys' Choir and to everyone's surprise, Camp Hill Junior Boys' Choir won!



Errol approached me and invited me to join him as he volunteered for this special event choir. We had both been soloists in the Camp Hill Choir and although a bit reluctant to join him, he espoused the benefits of singing and practicing in this special choir, rather than participate in the cleaning up and preparation to move the entire school to Laverton. Once I caught a glimpse of the perks that were on offer, I gladly let my name go forward.

We would be taken into the Civic Hall for days before the event. Usually about twice a day, we would gather with the RAAF Central Band and sing this piece that had been written especially for us to say thank you and farewell to the citizens of Ballarat. As I wrote this, I found a photo that was taken of the members of the RAAF Central Band relaxing at the back of the Civic Centre, which the *Ballarat Courier* published in the newspaper of the day.



Actual Photo Taken by The Ballarat Courier

To sing with the RAAF Central band was a great honour, but to dodge all the work needed to leave the base in a presentable condition for hand-over, was a perk that I really enjoyed and was ever so pleased that I had put my vocal services to the good of the RAAF and the RAAF Central Band by volunteering to sing their Farewell Song, which with the passage of time, I cannot remember a word!

Finally, the big day came, the Civic Farewell was behind us, the multiple 'thank you' from the crowds both to the RAAF Central

Band and to our small group of choristers were slowly fading from our ears. Now it was time to slip back into the real Air Force and climb into our finest parade gear and participate in the final event of the Unit's long association with the City of Ballarat, the Farewell Parade.

I remember standing at attention for a remarkably long time, and something took my fancy. We were on parade in front of the Ballarat town hall, when I looked up and noticed that Ballarat was spelt, "B-A-L-L-A-A-R-A-T". (later, in life, I learnt that Ararat was also spelt with four 'a's in the spelling. To beat the boredom of that long parade, I conjured up in my mind that with this privileged information, I could no doubt make a few extra shillings when I asked people to spell 'Ballarat'. The time I spent on the farewell parade was not in vain at all. I learned how to spell 'Ballarat'. That information could come in very handy one day!



The Ballarat Town Hall

Finally, with all goodbyes and farewells completed for the end of the RAAF era in Ballarat, those with motor cars piled into them ostensibly to drive in convoy down to



Laverton. Others clambered aboard busses with all their worldly goods and chattels, and they were driven down to Laverton.

Radio School was moving out of Ballarat, holus bolus and heading for the next chapter in the life of the School of Radio and to my next posting, and another great adventure in the Air Force of the early 1960's.

It was with a reasonable amount of fear and trepidation that I undertook this move for my track record had not been good. My first posting, to No. 1 Recruit Training Unit had seen my course participate in the final pass-out parade at Rathmines which was then closed as a RAAF Base. I had moved on to RAAF Base Ballarat, and there too, Ballarat Base had closed its doors while I was there. It must be me! Surely RAAF Base Laverton will not wither into the wilderness because of my presence. We will have to wait and see, so until next edition, you will have to wait and see what ill-fortunate spells I cast on RAAF Base, Laverton. Will it survive? Stay tuned.

### **People Who Impressed Me in My Service Career.**

A slight change in the title of this segment for this month. This quarter, I would like to tell the yarn about one of my classmates on 27 Radio Mechanics Course which began at Ballarat in January 1961. I would have liked to speak with this guy before I wrote about him, but as I haven't been in contact with him for fifty-five years, I'll just use his Christian name, to 'protect the innocent', as they say.

He was a great guy, full of fun and a friend to everyone that met him. He lived not far from me in Windsor, Brisbane, although I never knew him until we met at Ballarat. I will call him John, by which name he can identify. After his six years in the Air Force, he took his discharge and when we were last in contact, he was manning a remote radio station in the outback.

While at Ballarat, I went to Melbourne one weekend and bought myself a two-year-old Morris Major Mark One Sedan. The Air Base being seven kilometres from the centre of Ballarat town and not serviced by public transport, we trainees had to rely on hitching rides into Ballarat, and most times, we had to rely on taxis to bring us back to the base.



*1958 Morris Major Mark 1 Sedan*

John was among the friends from my course I often took with me in the Major. On arrival in Laverton in the April of 1961, John decided to launch out and buy himself a car. He went into Melbourne and bought a very well kept, well immaculate, really, 1938 Chevrolet Fleet Master sedan.

After class on Friday afternoon, John drove his Chevy into Melbourne with great pride. Unfortunately, while driving along Footscray Road, the Chevy developed a serious knocking sound, emanating from the engine bay. He made his way back to Laverton and returned with overalls, some tools, and an oil pan. He removed the oil, then the oil pan. He discovered that a conrod was broken; he removed the con rod and piston. He replaced the oil pan; poured the oil back in and started the engine.





He reckoned that five cylinders should work as efficiently as six and drove his immaculate Chevrolet sedan to the nearest used car dealer. "It's a beautiful looking machine," the salesman said, "Do you have any problems with it?"

John responded, "Ah well, it's missing a bit." To which the salesman replied, "No worries, Mate, we'll soon tune that up!" They made a deal. John collected his cash and did not lose one penny on the deal.



1938 Chevrolet FleetMaster Sedan

That was the day that I learned that it is not what you say, but how you say it. John never told an untruth, but the salesman missed his statement by a mile and 'assumed' that he was talking about the engine misfiring. What John meant, was that the engine was missing a part, an important part, – a conrod and piston!

This double talk occurred again when four of us, all Radio Mechanics, went on our first posting, to Amberley. We hung out together and one night, we found ourselves where all young people in Ipswich and district seemed to congregate, the Palais Royal Hotel on the corner of Brisbane Road and East Street.

In those days, the drinking age in an hotel in Queensland was twenty-one. The four of us had ordered our 'Double Sars' (Sarsaparilla,) as that was our preferred drink of choice. (Being recently graduated Radio Mechanics, we had to keep a clear head for our work concentration on Air Force radio equipment the next morning! – If you believe that, read on!)



Two burly policemen came into the Palais Royal and demanded of the first of our group, "How old are you?" He spluttered, "Twenty." The policeman sternly ordered, "Out!" He turned to our second under twenty-one-year old and demanded, "How old are you?" To which came the reply, "Twenty". Same directive, "Out!" then he turned to John. "How old are you?" Word twister John, replied, "Twenty (pause) too!" The cop said, "You are OK."

Then turned to me and hoping to ride on John's back, said, "Same as him!" The policeman replied, "OK, you two can stay but you two," pointing to the first two who admitted to being only 20, the cop said very brusquely, "Out!" You would think that as none of us received more than a friendly warning, that I would have left it at that, but no, I bounced up and said, "If they can't stay then I am not staying without them ," and led my three mates out of that bar as fast as we could.

How could John be blamed if the policeman mistook his answer of 'Twenty (pause) too,' when the policeman heard, "Twenty (pause) two?"

In my next twenty-five plus years, I was to see many other examples of double-talk by clever military personnel. I will give John his due, he was the Grand Master of the skill.



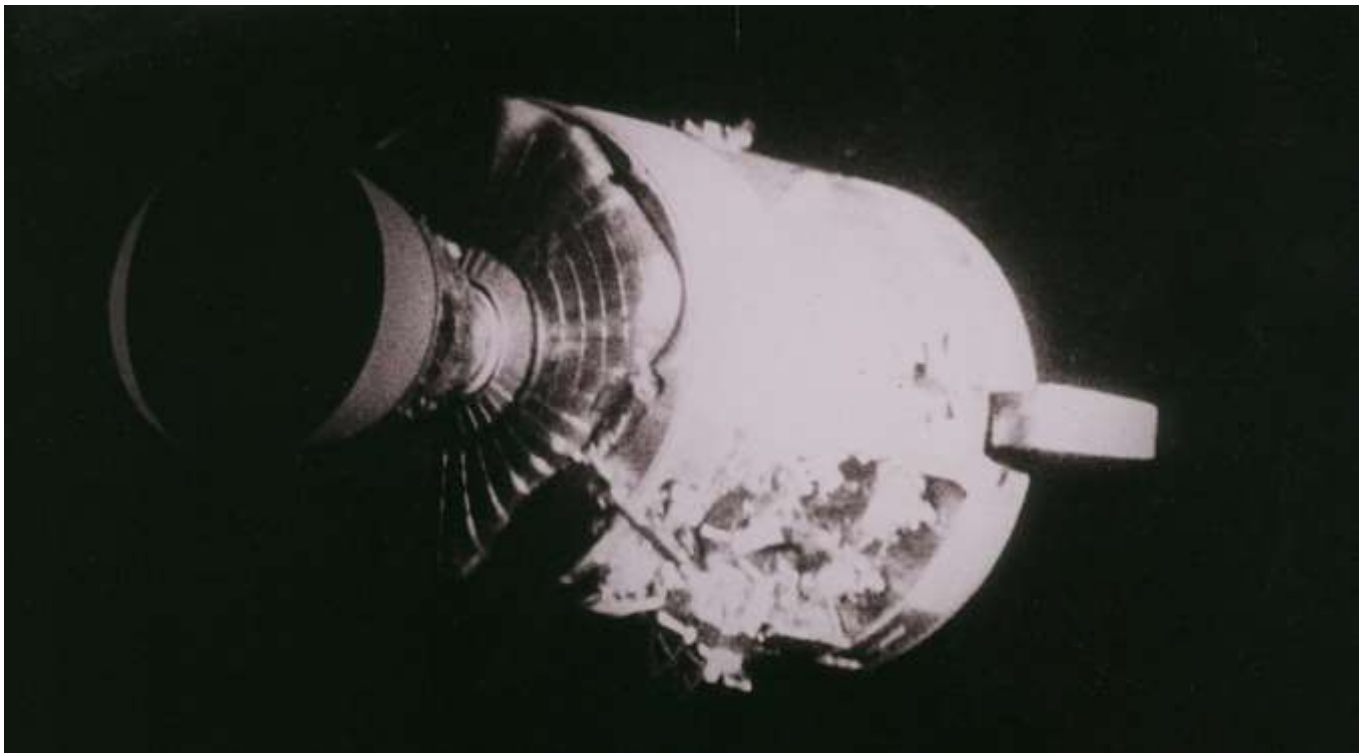


## "Houston, we've had a problem":

NEW ATLAS

The story of NASA's most successful failure.

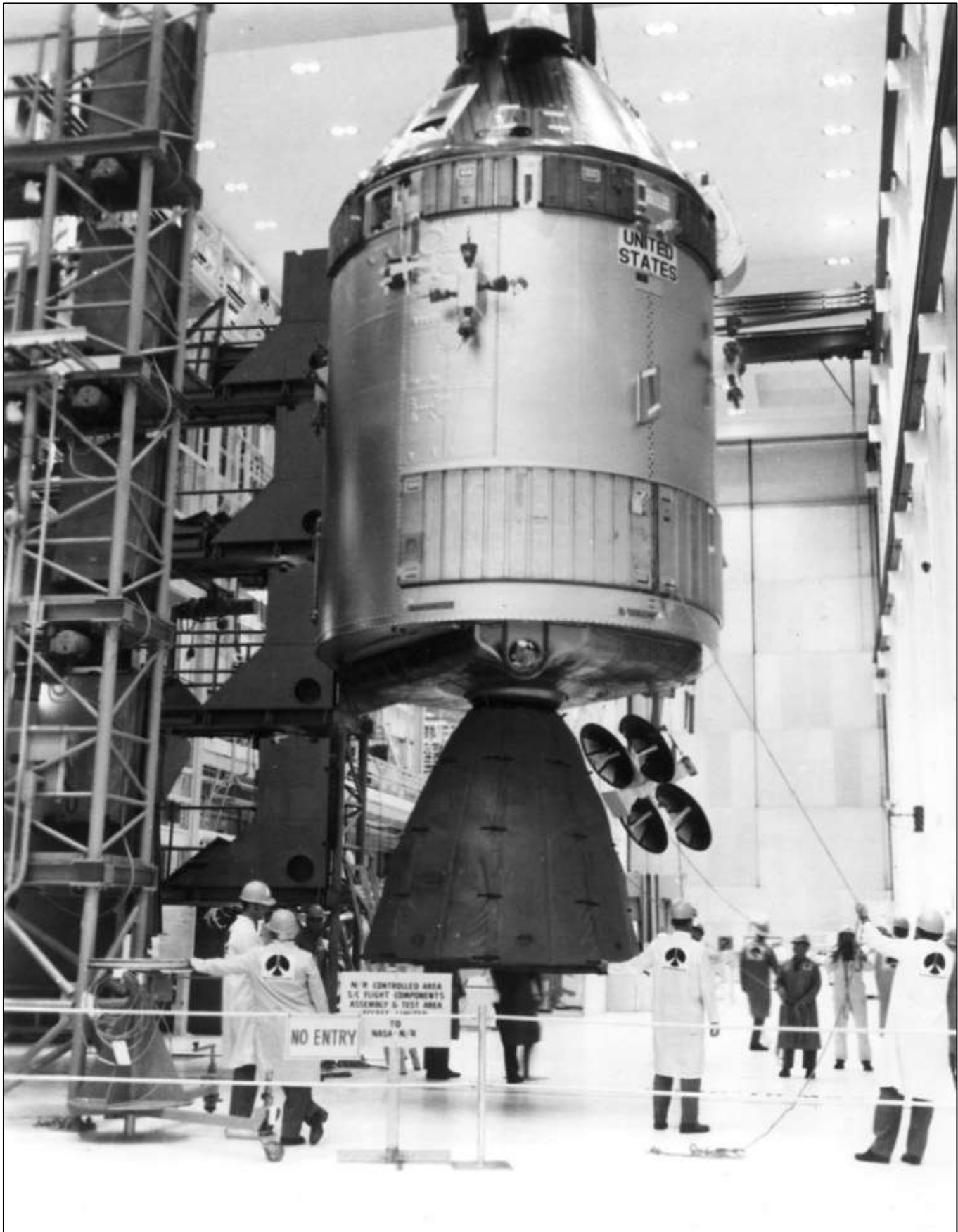
Fifty years ago, and just seven months after Apollo 11, the third manned lunar landing attempt was already seen as routine, even boring, but in a little over two days, the Apollo 13 mission would become one of the most remarkable stories of survival, courage, and luck in history.



The Apollo 13 service module showing explosion damage.

On April 11, 1970, at 19:13 GMT, Apollo 13 lifted off from Launch Complex 39A at the Kennedy Space Centre in Florida. Atop the giant Saturn V booster sat Command Module 109 and Service Module 109, which together formed CSM-109 (otherwise known as Odyssey), and the lunar module (LM) Aquarius. In the couches of the command module were mission commander James A. Lovell, Jr., age 42, a US Navy captain on his third space mission and his second visit to the Moon. Next to him was command module pilot John L. "Jack" Swigert, Jr., 38, a space rookie who was a last-minute replacement for astronaut Ken Mattingly, who was scrubbed after being exposed to the measles. On the other side of Lovell was lunar module pilot Fred W. Haise, Jr., 35, on his first and only spaceflight.





CSM Odyssey



This was to be the most ambitious Apollo mission to date. Building on the lessons learned from Apollo 12, it was to make a precise landing on the Moon in the highlands of the Fra Mauro region, farther north from the equator than Apollo 11 or 12, meaning that both the Saturn V booster and the lunar module carried more fuel than any other mission.

But another thing that marked the mission was a sense of complacency, even apathy. If the Apollo missions now seemed routine to the men and women of NASA, the public was downright indifferent. They'd been sold Apollo as a great adventure and they were getting bored with the repeats of the same plot. It was a sentiment shared by the US Congress. NASA's budget had been going down ever since the main work on Apollo was completed in 1964, but now Apollo 20 was cancelled and the trimming looked set to go much deeper.

This complacency wouldn't have lasted long if NASA knew Apollo 13 had a bomb on board. It wasn't the work of terrorists or enemy saboteurs but the result of the kind of oversight that can occur in any super-complex endeavour. In fact, it was a credit to NASA that such errors didn't happen more often. However, this time, the oversight was nearly fatal.

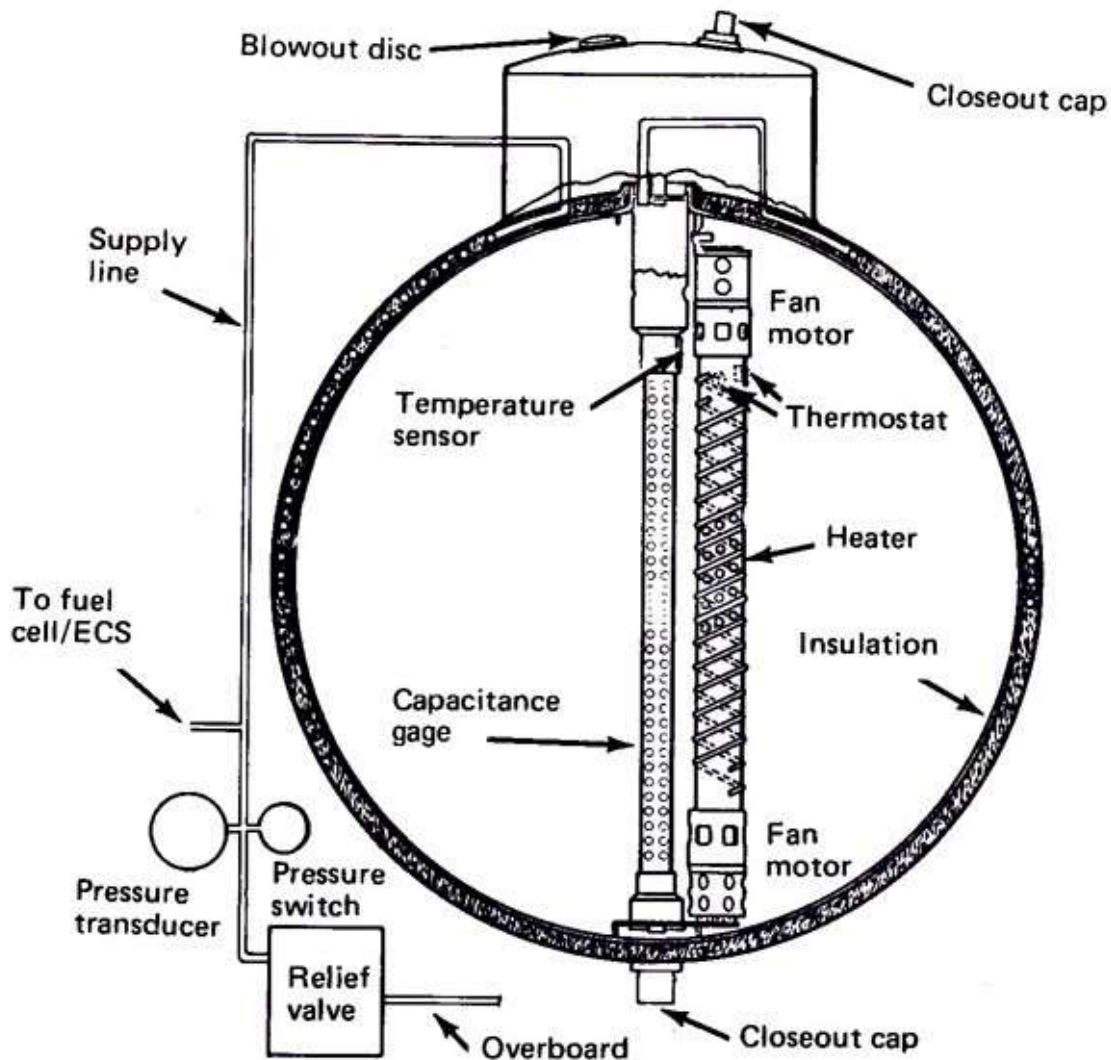
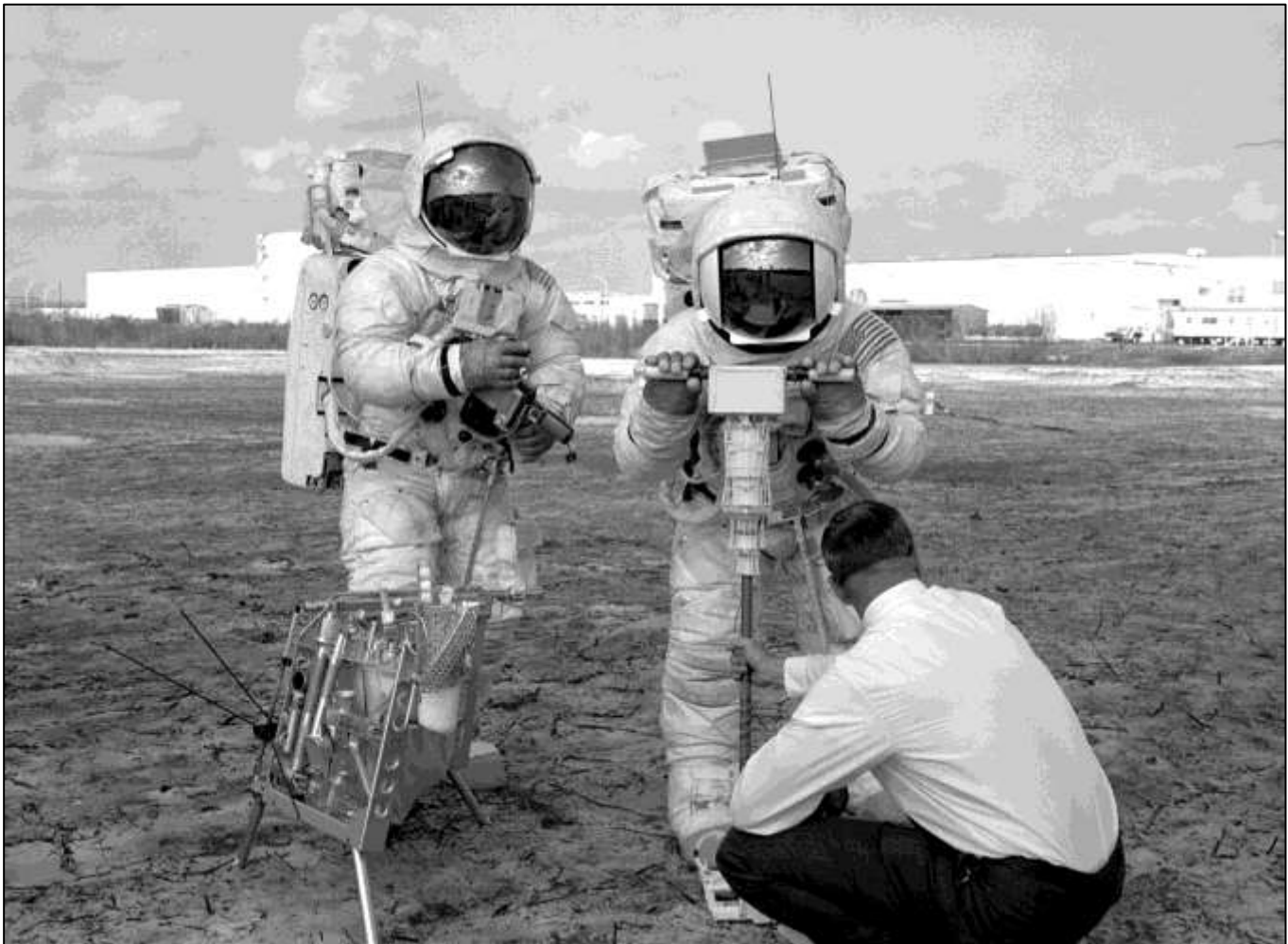


Diagram of the Apollo 13 oxygen tank design



Behind the conical command module that acted as a home for the Apollo astronauts is the service module. This cylindrical assembly with a bell-like cone at one end contained the main engine and supplied Odyssey with oxygen, water, electricity, and long-range communications with Earth. Inside the service module was a bay holding a number of systems, including two liquid oxygen tanks that were the primary source of oxygen for the command module. Also in the bay were a tank of liquid hydrogen and three fuel cells. The hydrogen and oxygen feeding into the fuel cells provided Odyssey with power and water. There was a history to one of these units. The No. 2 oxygen tank had been previously installed in the service module of Apollo 10 but was then taken out for modification, during which it was damaged and then sent back to the factory for repairs. It was then installed in the Apollo 13 service module.

Like all NASA flight gear, the No. 2 tank was tested and retested even after installation. On March 16, 1970, the tank suddenly developed a fault. It wouldn't drain properly. It was finally decided to run the tank's electrical heater to boil the oxygen. This didn't resolve the problem entirely, but because the oxygen tanks didn't need to drain in space and due to time constraints, No. 2 was cleared for flight.



Apollo 13 astronauts rehearsing a lunar EVA

However, the heaters had been upgraded so that they could operate at 68 volts instead of the previous 28 volts, but the thermostatic switches that controlled the heaters weren't changed. As





a result, during the final test, the switches welded shut and the wiring was frayed. Another problem was the use of aluminium components and Teflon insulation, both of which burn in pure oxygen.

To put it more simply, No. 2 tank was now a bomb waiting to detonate.

There was no sign of any trouble as Apollo 13 lifted off from the pad. The weather was good and the only difference from previous Saturn V launches was that it cleared the tower a bit slower because of the extra fuel it carried. When the second stage fired, the centre of the five engines started to go into severe [pogo operations](#) and shut down. The other four engines throttled up to compensate and Mission Control and the crew thought that the mission had passed its one major glitch.



Once the S-IVB third stage separated and fired for the first time, Apollo 13 settled into an orbit 120 mi (193 km) above the Earth. Two hours later, the rocket fired its engine again and the astronauts were on their way to the Moon.

***Apollo 13 lifting off.***

The CSM Odyssey then separated from the S-IVB, Swigert turned the craft around, docked with the lunar module Aquarius and eased it out. With a slight course correction, Apollo 13 was on a trajectory to circle the Moon, while the S-IVB went on a collision course with the lunar surface where it would impact three days later, an event that would be recorded by the seismograph left behind by Apollo 12.

***"Houston, we've had a problem"***

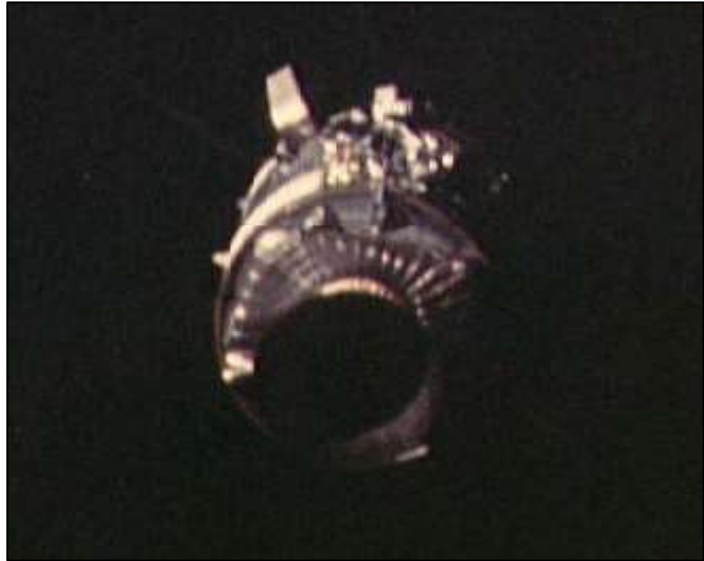
Everything was relaxed for the first two days of the mission. At 55 hours into the flight, Lovell used the command module's television camera to provide the audience back on Earth with a tour of Odyssey and Aquarius. Unfortunately, since none of the US networks carried the broadcast, the audience was reduced to Mission Control and a few of the astronauts' relatives.

At hour 56, 210,000 mi (330,000 km) from Earth, after completing the broadcast, NASA gave the men a few minutes to recover before they went back to work, with Lovell stowing the camera and



Haise testing and shutting down the lunar module's systems. Meanwhile, Swigert was carrying out routine maintenance tests on the service module's oxygen tanks to track down a sensor malfunction.

***The Apollo 13 service module after separation***



Back at Mission Control in Houston, the Electrical, Environmental, and Communication officer (EECOM) Sy Liebergot asked Swigert to activate the fans to stir the liquid oxygen in No.2 tank, so it wouldn't settle into layers. 95 seconds later, things went wrong. There was a short circuit in the heater in tank No. 2, which started a fire. Pressure increased suddenly as the oxygen flashed into a gas and the tank's structure gave way with explosive force.

Though an entire panel fore and aft on the service module was blasted away and there was extensive damage, the first clue the astronauts had that something was wrong was a loud bang. At the same time, telemetry with Earth went out for 1.8 seconds, the power readings on the instrument panel started fluctuating and the spacecraft was jolting as the automatic pilot kept firing the attitude control thrusters to compensate against some unknown force.

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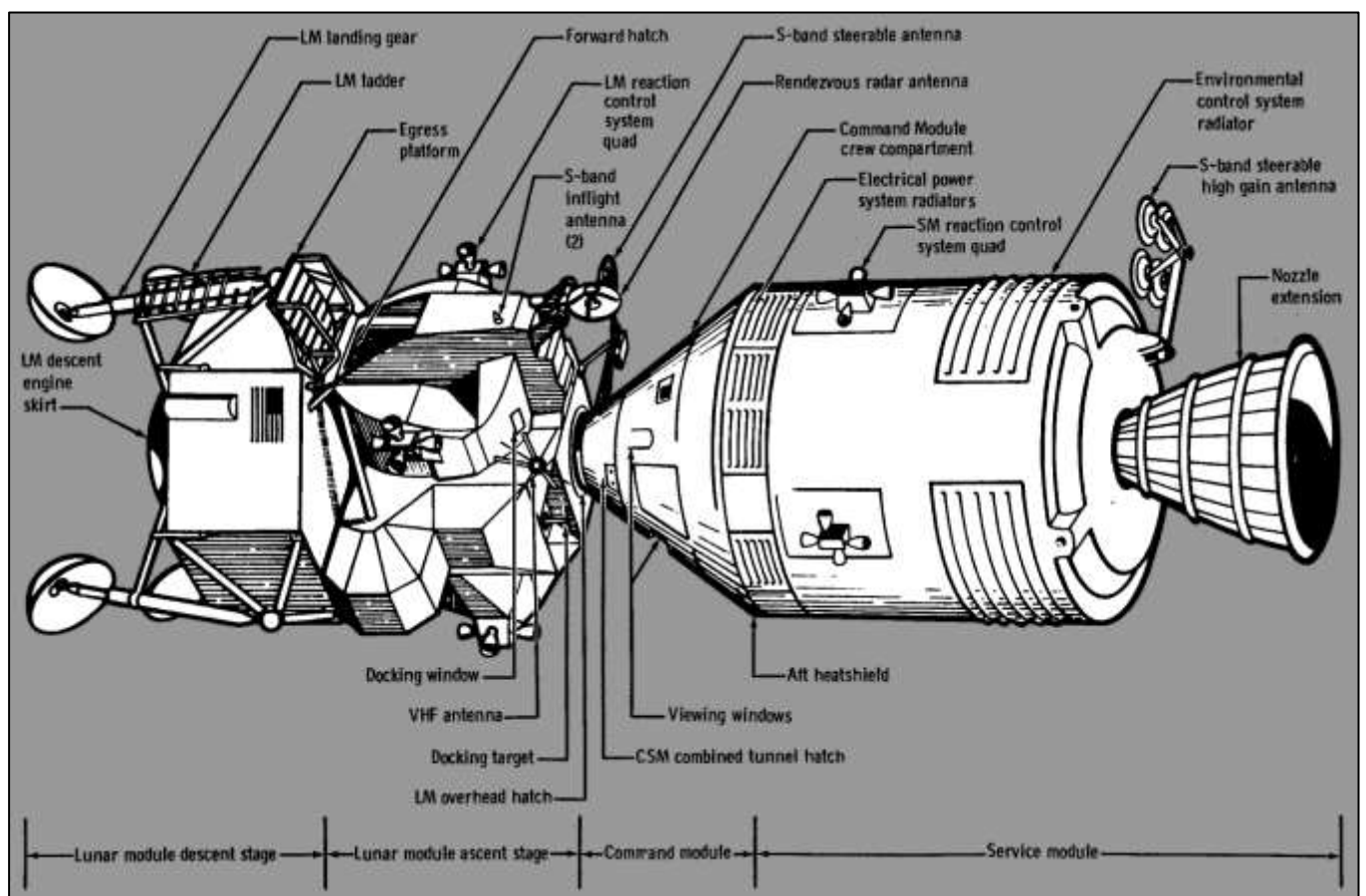


Mission Control in Houston.



Twenty-six seconds after the bang, Swigert called back to mission control, "Okay, Houston, we've had a problem here." Lovell then repeated and elaborated. "Houston, we've had a problem. We've had a Main B Bus undervolt."

The initial fear was that Odyssey or Aquarius had been hit by a meteorite and that one or both of the crew modules had been holed, but there was no evidence of a serious loss of pressure. The Main Bus B undervolt fault indicated that the service module's three fuel cells were malfunctioning. Then Bus A started losing power and two of the fuel cells were fading, with both dead in under half an hour. The more Mission Control and the astronauts checked, the worse things looked. Oxygen tank No. 2 had zero pressure and No. 1 was leaking fast. Also, the computer had reset and was running a fault check, while the high gain antenna had switched to a secondary mode.



Back on Earth, Liebergot couldn't believe what he was seeing on his panel. The service module was designed with multiple redundancies and constructed out of components that didn't need maintenance in flight, but he saw numerous systems failures of the sort that one only saw in simulators when the operator wanted to make sure the astronauts were paying attention. Apollo 13 in flight configuration

At first, Liebergot thought that it had to be an instrument failure, but Lovell reported that he could see debris outside the ship and an expanding cloud of gas. It was this that was pushing on Odyssey and against which the autopilot was fighting. Worse, No. 1 tank was leaking fast and when it went, the service module would start sucking oxygen from the command module's tiny reserve surge tank.





Lead Flight Director Gene Kranz, who had such high authority at Mission Control that the only way to veto his decisions was to fire him, ordered the command module surge tank sealed off, but the rapidly depleted tank No. 1 would only keep the remaining fuel cell going for about two hours. After that, the only power would be from the command module batteries, which were only meant to last a few hours.

It was obvious that the Odyssey was a dying ship and that the lunar landing was scrubbed. The most obvious next step was to preserve what was left in the command module's batteries by powering down its systems, literally turning it off. This was something that had never been done on a mission before and the engineers weren't sure how to turn it back on again for the return to Earth. This raised two more obvious questions: How to get back to Earth and how to keep the three men alive during the trip.



Post-flight test shows how the oxygen tank explosion blew off the service module's bay panel

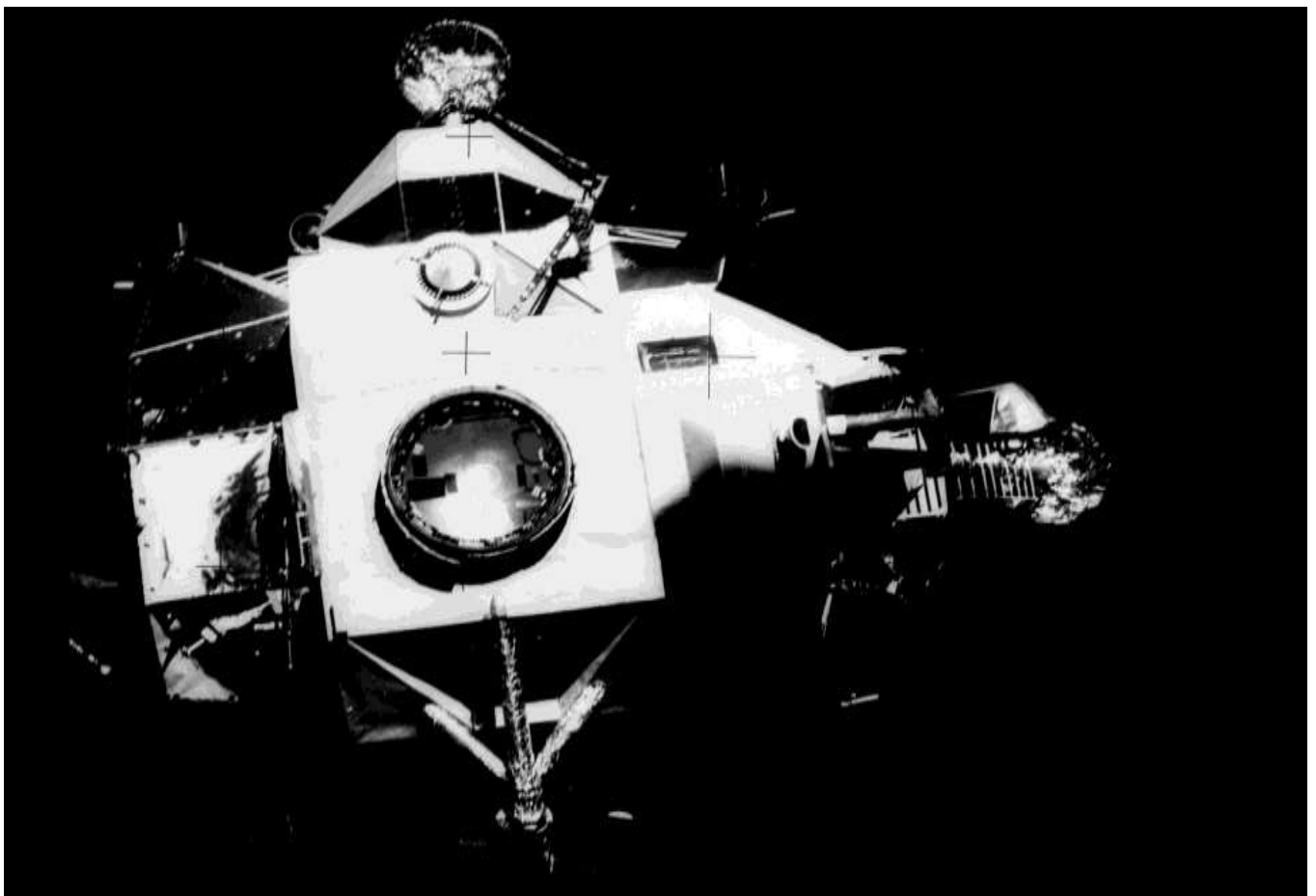
The answer to the second question was to use the lunar module as a lifeboat, a scenario that had already been considered as an emergency measure for Apollo 10, 11, and 12. It was possible. The LM was intact, had plenty of oxygen in its life support systems, engines, and spacesuit backpacks, but the LM was only designed to support two men for 45 hours. Now it had to keep three alive for four days.



One limiting factor was power. Instead of fuel cells, the LM used silver-oxide/zinc batteries with only 2,181 Ah capacity. Some of this was needed to keep the command module's batteries charged, so everything not absolutely essential on the LM was shut down and energy consumption kept below 20 percent.

It would be a very cold, dark journey home.

Water was another problem. It was not only required to keep the astronauts alive, but it was also used to cool the LM's systems. The crew was rationed to six ounces (177 ml) each a day and instructed to only eat wet-packed foods. Even then, the spacecraft would run out of water five hours before re-entry, but experience on Apollo 11 indicated that the LM could continue to function for that long without it.

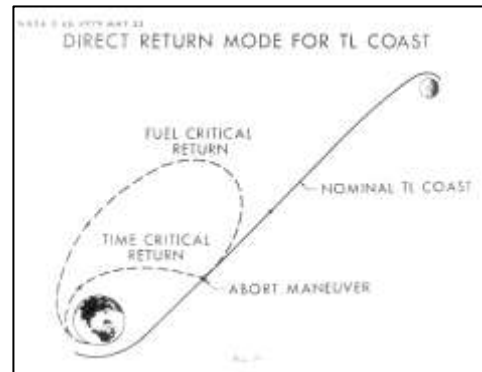


The lunar module Aquarius

Under normal circumstances, the way to get Apollo 13 back to Earth would have been using a direct abort trajectory, which would have involved firing the service module's main engine to place the spacecraft in a truncated orbit home. This would have been the fastest way, but Kranz vetoed this because no one knew how badly damaged the engine was. The alternative was to carry on, loop around the Moon and swing back to earth, using the attitude control rockets for any course corrections. Had this been one of the earlier Apollo missions, such a free return orbit would have needed little more than sitting back and letting gravity do the work.



But that wasn't possible for Apollo 13 because its goal of landing in the lunar highlands put it in a hybrid orbit, a variation of the free return orbit, except that it needed an engine burn to make actual re-entry on reaching Earth, otherwise, the craft would simply have swung back into deep space. Since the service module was unavailable, this left the crew with only the less powerful descent stage engines on the LM. Before shutting down the command module, Lovell wrote down the guidance readouts regarding the spacecraft's orientation and did the calculations (without a calculator but with Mission Control checking his sums) needed to feed the data into the LM's guidance system, however, making the necessary manoeuvres using the LM required both Lovell and Haise at the controls and a lot of learning by doing.



There was also the question of whether to jettison the service module. This would have meant less weight for the lunar module's engine to push and cut the return trip by 36 hours. Unfortunately, this would have meant exposing the Command Module's phenol resin heat shield to the cold of space and the engineers weren't sure what damage this would do, so the service module stayed.



The Earth as seen from Apollo 13

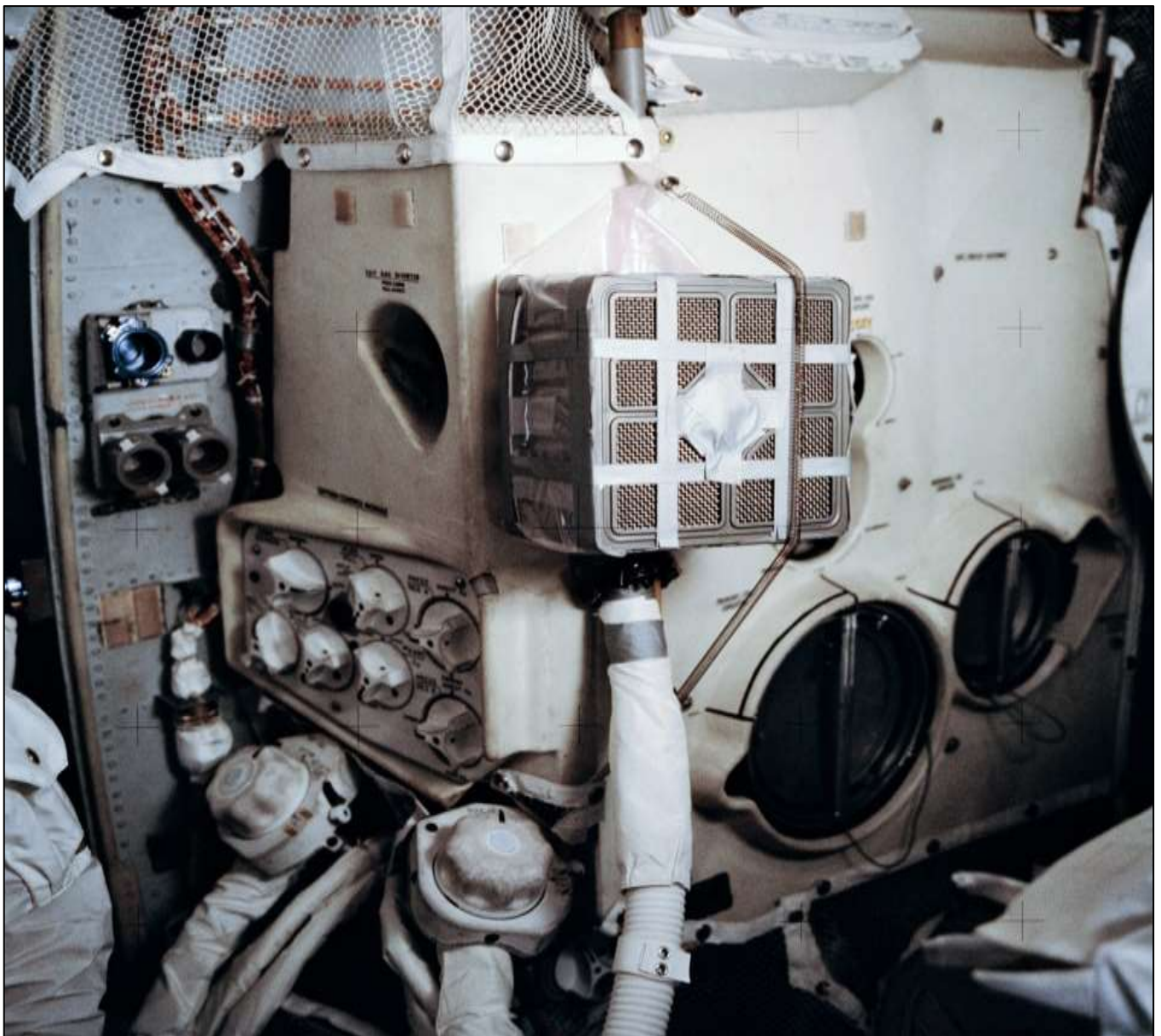
A 34-second burn with the LM's engine put the craft back on a free return trajectory but more burns would be needed if the command module was to land on Earth where it could be recovered safely. This meant one of three options: The Indian Ocean, where the US had few recovery units; the South Atlantic Ocean, where the same problem arose; and the South Pacific, where a recovery fleet was already steaming.





In the end, NASA opted to make another engine burn two hours after Apollo 13 passed its closest point to the Moon and 73 hours, 46 minutes into the flight. This would shorten the return by 12 hours and put the command module in the Pacific. This second four-minute burn was difficult enough, but with all the debris floating around it wasn't possible to orient the spacecraft using the stars, as was standard procedure, so the crew lined up using the Sun and the Moon, again, using the LM's guidance system. This brought them to within a half a degree of the desired angle.

There was still much to do on the way back to Earth, but a more immediate problem was the men's own breath, which was pumping carbon dioxide into the confined space of the LM. At first, this wasn't a threat because there were lithium hydroxide canisters that scrubbed the CO<sub>2</sub> from the air, however, these were meant for two men for 45 hours and within 36 hours after moving into the LM, the atmosphere warning light came on. The air in Aquarius was turning deadly and, if the problem wasn't solved, the crew would be dead a day before reaching Earth.



The "mailbox" adapter installed



In an ideal world, this would have been an easy fix. The command module also had scrubber canisters, more than enough for the trip home. Why not just move them over and plug them in? The crew couldn't because the canisters aboard Aquarius were round and the ones from Odyssey were square. Like a bad joke, the round holes of Aquarius' life support system wouldn't accept Odyssey's square pegs. Like those school exercises where students are given a bag of items and are told to build a crane or a hovercraft, NASA engineers had to as quickly as possible figure out how to build an adapter using materials known to be on the spacecraft, write up clear and detailed instructions on how to assemble it, and relay this to the astronauts.

According to Apollo astronaut Ken Mattingly, the solution was from a simulator exercise for training the Apollo 8 mission crew, where a similar emergency was solved by blowing air through a canister using the spacecraft's vacuum cleaner hose.

They soon came up with a contraption called the "mailbox," which was made from plastic, covers from procedure manuals, vent hoses, and other bits and pieces, all held together with duct tape. Just reading the procedures over the radio took an hour.



Once the burns were completed, all but the most essential lunar module systems were shut down. This helped to conserve precious resources, but it also made the spacecraft a miserable place to be as both the command module and the LM went dark and dropped to the temperature of a refrigerator, reaching as low as 3 °C (38 °F). There were the spacesuits, but their non-porous rubberized construction would have made the astronauts unbearably hot and sweat too much. Since they had only their flight suits, Lovell and Haise put on their EVA boots, while Swigert wore an extra coverall. Swigert was especially uncomfortable because his feet were wet after a spill while filling bags with drinking water.





As if to add insult to injury, the crew couldn't even dump their urine overboard for fear of altering the spacecraft's trajectory, so more plastic bags were used for storing the waste. The cold also caused the moisture in the air to condense on the bulkheads and behind the equipment panels in both the CM and the LM. Fortunately, the electronics were all well-insulated, but it was still like living in a leaky tin shed during a winter rainstorm.

Using the Earth's terminator line between day and night as a target, the LM made two more course corrections, which was tricky because the LM's computer had been shut down to conserve power. About half an hour later, the service module was jettisoned by firing the explosive bolts that secured it to the command module. As it drifted away, the astronauts could see the damage caused by the explosion, including to the main engine, showing that the decision to not use it was justified.

However, they were not home free. Powering up the command module was hard enough, the protocols having been worked out in only three days, but without the reaction thrusters on the service module, the LM couldn't be jettisoned because the command module couldn't move away. This was solved by closing the hatches between Aquarius and Odyssey, leaving the air in the trunk instead of depressurizing. As the clamps were released, the air pushed the two craft apart as it escaped.

As Odyssey entered the Earth's atmosphere, the build-up of hot, ionized plasma around the capsule caused a radio blackout. If you saw the film Apollo 13, you may remember the tense scene as Mission Control waited anxiously to re-establish radio contact. This wasn't just a bit of Hollywood suspense building. The four-minute blackout stretched to six minutes, raising the fear that the heat shield had failed. Fortunately, it did work, though exactly why the blackout was so long is still not entirely explained.



Apollo 13 being recovered after splashdown





On April 17, 1970, at 18:07 GMT, Odyssey splashed down in the South Pacific Ocean and was recovered by the aircraft carrier USS Iwo Jima. The mission lasted five days, 22 hours, 54 minutes, and 41 seconds.

The astronauts were in good condition despite being dehydrated and losing 50 percent more weight than any other space crew, though Haise did have a serious urinary tract infection due to his lack of water.



The Apollo 13 crew were in reasonable condition despite their ordeal

When the crew of Apollo 13 stepped onto the deck of the Iwo Jima, they were unaware that the whole world had been following their ordeal in numbers not seen since Apollo 11. "Nobody believes me, but during this six-day odyssey we had no idea what an impression Apollo 13 made on the people of Earth," said Lovell. "We never dreamed a billion people were following us on television and radio and reading about us in banner headlines of every newspaper published. We still missed the point onboard the carrier Iwo Jima, which picked us up, because the sailors had been as remote from the media as we were. Only when we reached Honolulu did we comprehend our impact, there we found President Nixon and [NASA Administrator] Dr. Paine to meet us, along with my wife Marilyn, Fred's wife Mary, and bachelor Jack's parents, in lieu of his usual airline stewardesses."





So what really got Apollo 13 home when the odds were so stacked against them? Certainly, courage played a part. All three men were test pilots and reacted like test pilots. Knowing that panic would do nothing other than waste precious time, they concentrated on the job at hand. Training was also important, as was innovation, as was the combination of relentless training combined with quick, expert thinking from the team on the ground.



The crew of Apollo 13 with President Richard Nixon

But a later NASA report showed that luck had its part to play as well. This isn't to diminish the part played by the astronauts, NASA, or the contractors, because luck favours the prepared.

For one thing, it was fortunate that Gene Kranz and Glynn Lunny, the most experienced flight directors, were present when the accident happened. It was also good fortune that the LM had extra fuel aboard for the course corrections. In addition, Lovell had extensive carrier landing experience, allowing him to adapt quickly to the spacecraft's counterintuitive gyrations. There was also the timing of the accident. If the explosion had occurred while the Odyssey was undocked from Aquarius, the crew would have been without their lifeboat and the engine needed to return to Earth.

*The improved oxygen tank used on Apollo 14 and later missions*



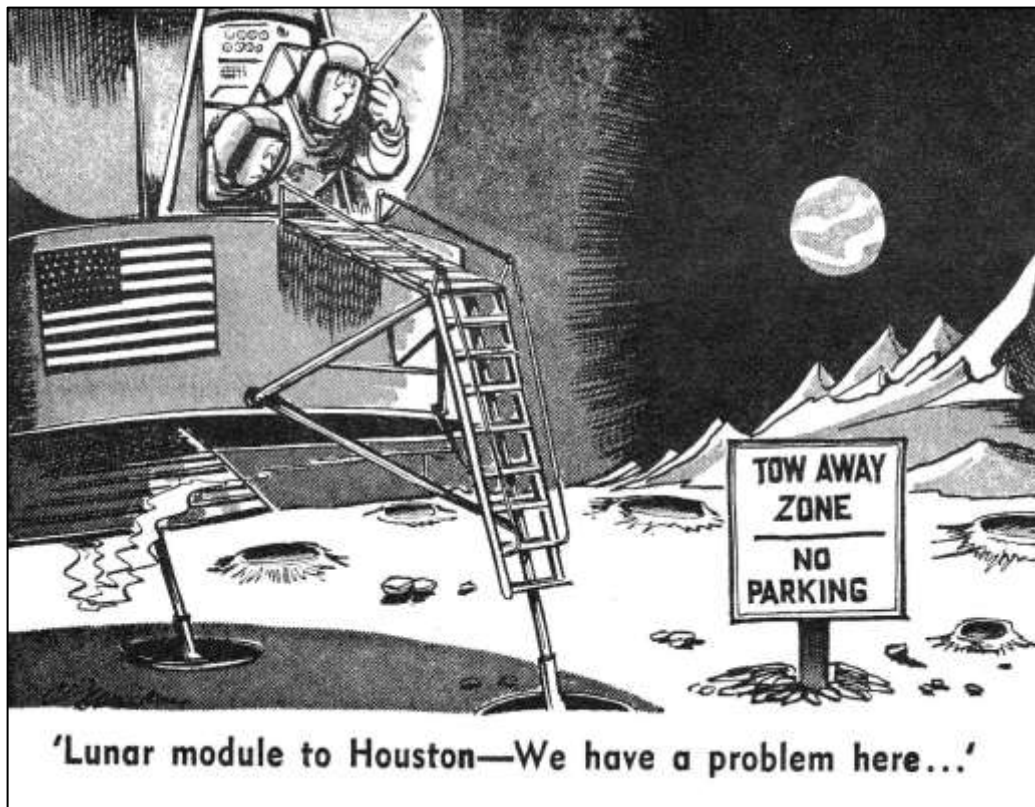


Then there was the high-gain antenna surviving the explosion despite being damaged. This meant less than two seconds of vital data was lost. The timing of the explosion coming just after the television broadcast meant that some of the LM's systems were powered up, so emergency power wasn't needed to turn the spacecraft on. The broadcast also meant that the crew was not sleeping as scheduled, so they were already alert and active when the accident happened. Even tragedy helped. The [Apollo 1](#) fire in 1967 led to improvements in CM design, such as a better caution and warning system, and there were extensive electrical insulation improvements, protecting the systems against water damage.

In the short term, Apollo 13 was the mission that NASA wanted to forget. Despite the daring rescue, it was like Dunkirk – a successful defeat. The space agency played down the event. The command module was gutted as part of the accident investigation and the capsule itself was unceremoniously carted off to the Musée de l'air et de l'espace in Paris, though it has since been put back together, and is on display at the Cosmosphere in Hutchinson, Kansas.

But the years have a way of changing things. In the past half-century, the legend of Apollo 13 has grown. Many lessons were learned from the harrowing adventure that were used to improve the design of later spacecraft and how they were operated. The story became the stuff of a number of best-selling books, two television plays, a feature film, and many documentaries. It's a story that continues to inform and inspire.

Click [HERE](#) to see additional pics of the mission.







## 100 years since the very first flight from Sydney to Melbourne

**ALUMNI** magazine

*This story appeared in the May 2020 edition of the Air Cadets Alumni Magazine.*

Flying has changed a lot over the past 100 years, though at no time has change been so enormous and devastating than in the last three months.

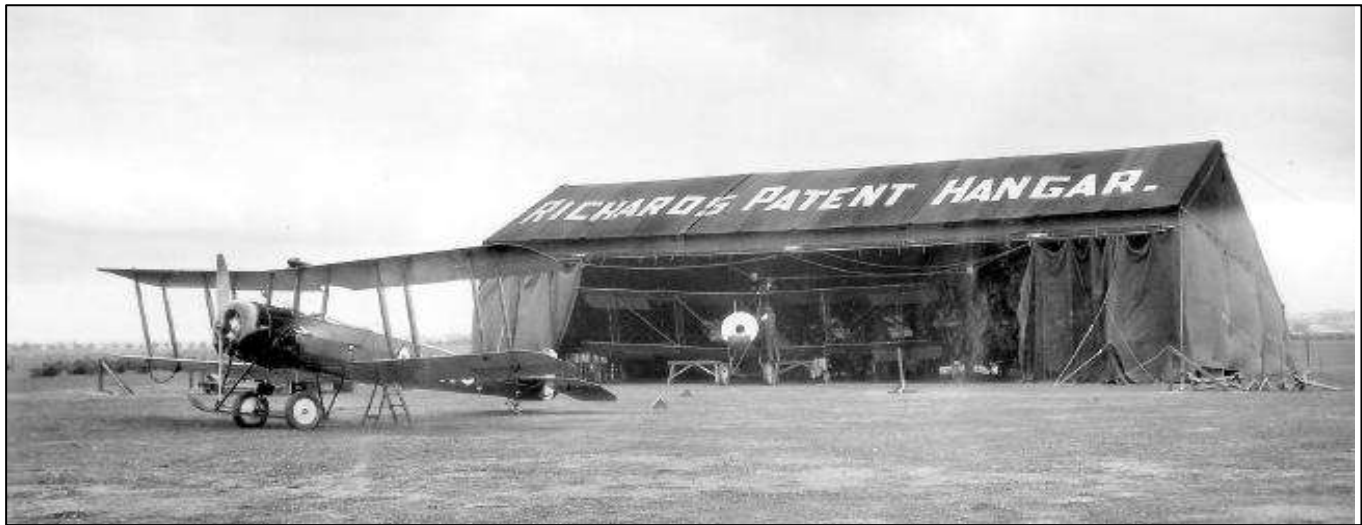
As travel grinds to a complete halt and airlines here and abroad struggle to stay afloat, Sydney Airport has quietly paid tribute to a milestone that harks back to simpler and more hopeful times for Australia's aviation industry. 14 April 2020 marked 100 years since the very first flight from Sydney to Melbourne, which took off from Mascot Aerodrome, later to become Sydney Airport, with a single passenger on board.



The plane was piloted by pioneer aviator Nigel Love, who sold joy flights and charters on his Avro 504K around Sydney. His only passenger on the April 14, 1920 flight was a wealthy businessman named John Gibson, who was keen to fly to Melbourne. Poor weather marred the journey and the plane eventually landed in Melbourne two days later at the huge cost of £25 an hour.

“While we face the current pandemic, let’s not forget we’ve come a long way since Nigel Love first flew this plane in 1920,” Sydney Airport said in a bittersweet tweet recently. “When the time is right, we look forward to welcoming everyone back to SYD.”

Sydney Airport marked its own centenary this year, while Qantas will hit its 100th anniversary on November 16. The coronavirus crisis has forced Qantas to suspend its international services and dramatically slash its domestic services by 90 per cent as lockdowns and travel bans end all non-essential travel.

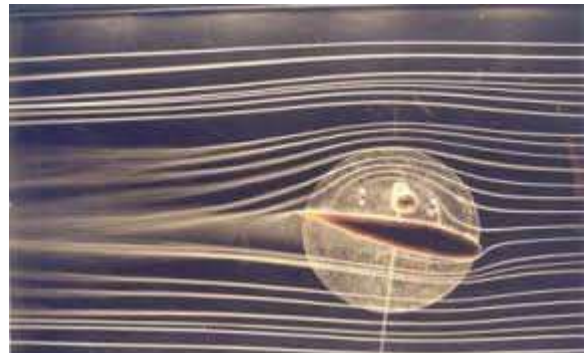


World War I pilot Nigel Love's hangar at Sydney Airport.

## Wind Tunnels in the AAFC

The aerospace environment has undergone a substantial transformation since the human race managed to achieve heavier than air flight. Before undertaking such an enterprise, it was deemed prudent to understand what will happen to that design once it is sent airborne. Testing of aerospace vehicles and aerospace products has been undertaken since the earliest manned flights with the use of Wind Tunnels. Indeed, the first documented use of a wind tunnel to test the flight characteristics of an aerospace vehicle was by the Wright Brothers in 1903.

Since that time, testing an aerospace article in the controlled environment of a Wind Tunnel has become standard procedure within the aerospace industry. So much so, that the principle has been adopted by the car industry, golf and tennis ball manufacturers, professional cyclists, etc, in an attempt to achieve minimum drag and thus extract maximum performance. Wind tunnels enable the aerospace industry to test aerospace vehicles in a safe and more cost-effective environment, where the loss of the test article would not expose people to unnecessary risks. Therefore, Wind Tunnels provide opportunities to test products to improve product safety, efficiency and reduce commercial cost.



Wind Tunnels around the world are designed to deliver specific test environments. There are Subsonic, Supersonic and Hypersonic Tunnels. They can be constructed as a Vertical or Horizontal facility. There are also Aqua-Dynamic Tunnels, which use water as the mass flow media to deliver similar outcomes at slower mass flow velocities. Aqua-Dynamic Tunnels are often used to test acoustic vibration on aerospace products. Some of the products may consider the cavity performance of an open undercarriage bay when an aircraft takes off or lands. Other examples are bomb bays and cargo/parachute doors. All of which need to be tested in a controlled environment to understand fatigue to determine the Margin of Safety or Failure Mode of a product.



In an attempt to demonstrate the value of a wind tunnel to AAFC cadets, Nos 315 and 327 SQNs in Canberra have both constructed and used a Wind Tunnel of rudimentary design to place an aerospace article under test and to analyse the results in a classroom environment. In the first instance, cadets constructed a wind tunnel out of cardboard boxes, a three-speed desk-top fan and an aerofoil.

The Wind Tunnel is made up of a range of parts. Firstly, wind generation is critical to the tunnel's performance to deliver enough wind to complete the test undertaken. In this case, they used a three-speed desk-top fan to deliver three separate wind velocities. Whilst the fan delivered sufficient wind for their purposes, a Contraction Cone was used to increase the velocity of the air to deliver more credible results. A Contraction Cone reduces the intake dimensions between the fan and the test article (and thus the volume of the tunnel) to increase the mass flow of the air, providing an artificial increase in velocity in the test section. The next component is the Settling Chamber to straighten the turbulent air coming off the fan so that it delivers a more controlled result over the test article. They used cardboard wrapping paper inserts to do this. The next section is the Test Section, where all the action happens. Finally, if required, the exhaust may have a Diffuser to reduce the velocity and mass flow of air leaving the Wind Tunnel. Their tunnels were low velocity and thus did not require a Diffuser.



The fundamental principle behind the test was to demonstrate what happened to the product under test and then to prove it through the application of physics. The program delivered three tests, firstly a wing mounted on a hinge to test lift characteristics across a range of Angles of Attack and wind velocities, secondly by using smoke to demonstrate boundary layer performance over the wing at variable Angles of Attack, and thirdly by tufting a wing to demonstrate what happens to the Boundary Layer as the Angle of Attack changes.

***The 315SQN AAFC Wind Tunnel set up with a smoke generator.***

The following photographs demonstrate how cadets managed the construction, implementation, test and analysis of the data to test their aerospace products.







*The same tunnel showing smoke in the Test Section going over the wing whilst the Angle of Attack is adjusted.*

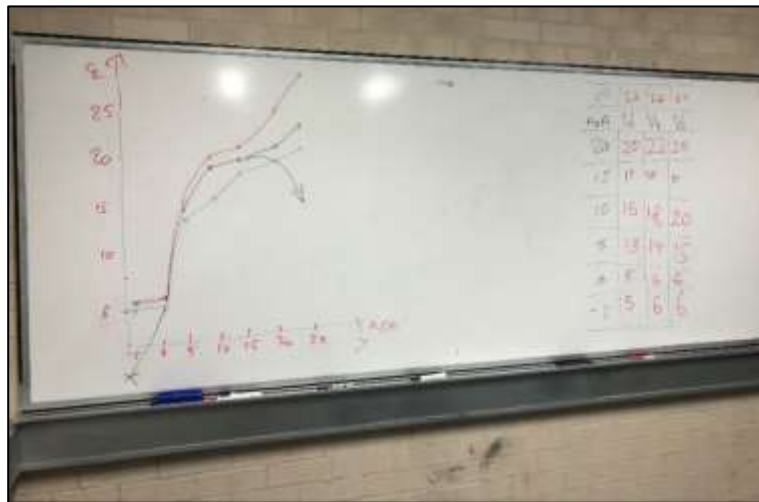


In the test below you can see the tunnel with the variable Angle of Attack test Article. The Test Article is placed upon a digital kitchen scale to measure the change in weight as the airflow travels over the wing through three airspeeds to generate lift. The digital scale is then zeroed. The various Angles of Attack are tested at the three wind velocities and transcribed into a Matrix on the Whiteboard. The critical element here is to ensure the test article does not contact the tunnel, as this will introduce interference to the result.





The various Angles of Attack are tested at the three wind velocities and transcribed into a Matrix on the Whiteboard.



Test Matrix and Graph

The test figures are then plotted on to a two-axis graph covering Angle of Attack on the bottom and Coefficient of Lift on the top to identify the result. The result demonstrated some flaws in the test design, where the test article tended to exhibit speed brake properties at high angles of attack, causing the result to be skewed. However, the result could be interpreted effectively as the Angle of Attack exceeded 15 degrees, where the numbers demonstrate a change in Coefficient of Lift output.



No 327SQN AAFC cadets with their Wind Tunnel.

On the top of the tunnel can be seen the Tufted Wing, which was manually rotated to vary the Angle of Attack whilst under test, demonstrating Boundary Layer Turbulence and Separation 'walking up' the wing from the trailing edge as the Angle of Attack is increased.

The results of the Wind Tunnel program clearly demonstrated to junior cadets how the Theory of Flight can be proven and why it is important to use a Wind Tunnel in the design, manufacture and management of aerospace vehicles and products. Most importantly, all cadets thoroughly enjoyed the experience, as it delivered a practical application to the classroom.



Wind tunnel employee.





ROYAL AUSTRALIAN AIR FORCE



*Official Opening*  
*School of Radio*

**Tuesday, 3rd December 1974**

**RAAF LAVERTON**



*Official Opening of School of Radio December 1974*

by



**Air Vice-Marshal G. T. NEWSTEAD, CBE**  
Air Officer Commanding Support Command



COMMANDING OFFICER  
SCHOOL OF RADIO



Wing Commander W. J. THORN





## The School Crest



The central motif of the School Crest is the Atom showing electron orbits symbolizing the electronic nature of the training function of the school.

This Badge was approved by Her Majesty, Queen Elizabeth II, and registered at the Royal College of Arms, London, in June, 1960.

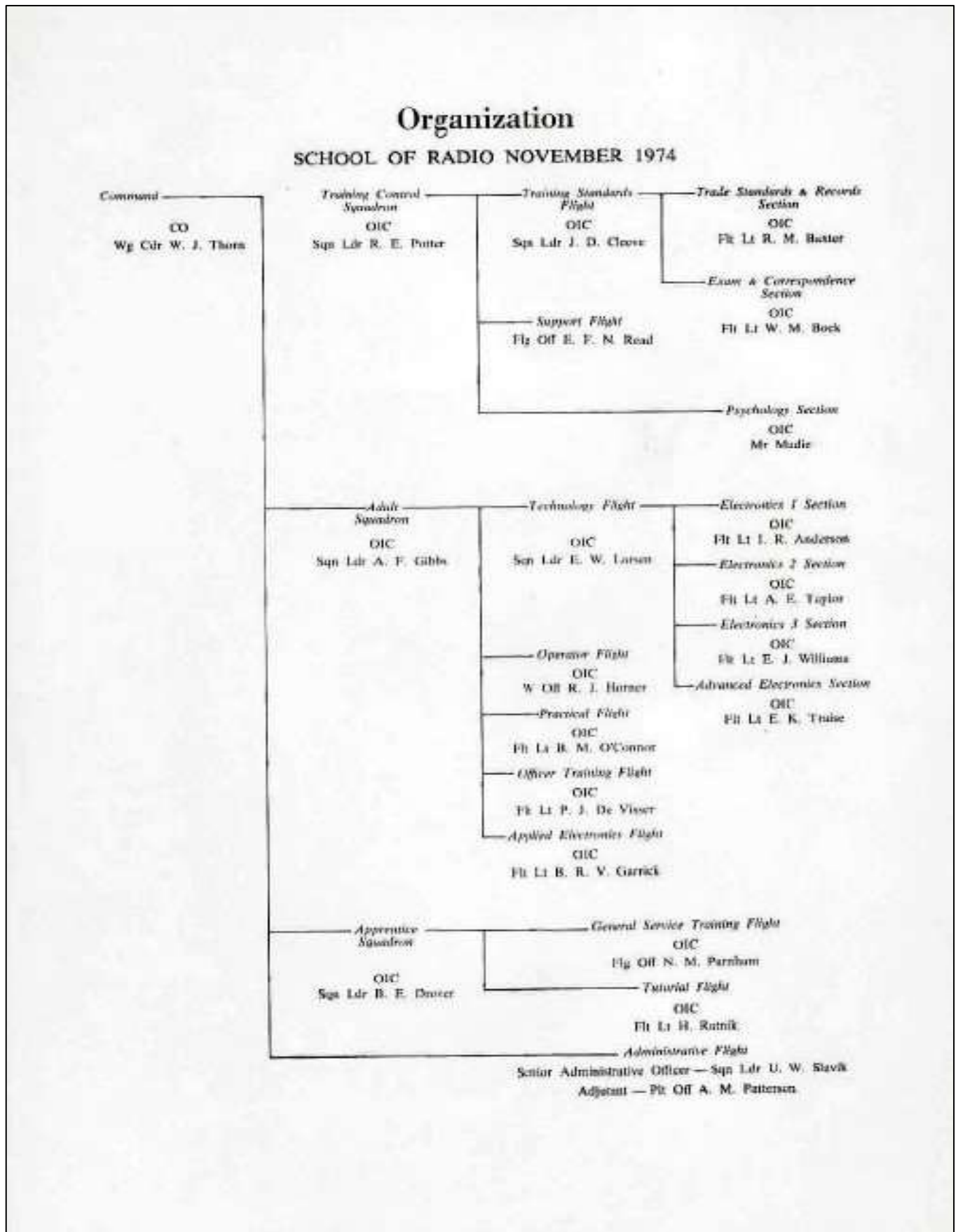
The motto is 'Readiness through Training'.

## The School Aim

The School provides graduate and post-graduate courses for technicians and operators, both of these are significant components of the overall RAAF telecommunications training scheme which produces:

- technicians capable of maintaining RAAF telecommunications equipment within performance specifications, and
- operators capable of operating telecommunications equipment.

Graduate radio technicians air, radio technicians ground, telecommunications technicians and operators courses provide the theory knowledge, and trade skills required of basic tradesmen. Post-graduate courses for ground radio technicians, telecommunications technicians and operators provide a significant part of the specialist training conducted in the RAAF.





## Past and Present Commanding Officers of the School

### *Commanding Officers Signals School 1935 to 1945*

Flt Lt H. W. Berry  
Flt Lt A. G. Pither  
Sqn Ldr McPherson  
Sqn Ldr G. Richmond (RAF)  
Flt Lt W. J. Dean  
Flt Lt R. D. Austin  
Sqn Ldr E. G. Finlay  
Sqn Ldr W. H. Murden

### *Commanding Officers Air and Ground Radio School*

Wg Cdr W. J. Guthrie November 1945 – August – 1947	Wg Cdr J. E. Reynolds March 1949 – June 1952
Wg Cdr R. Kingsford-Smith August 1947 – March – 1949	Wg Cdr A. A. B. Slight June 1952 – December 1952

### *Commanding Officers School of Radio*

Wg Cdr A. A. B. Slight December 1952 – September 1954	Wg Cdr E. R. Hall July 1964 – June 1968
Wg Cdr G. E. Prosser September 1954 – February 1957	Wg Cdr R. K. Starkie June 1968 – December 1971
Wg Cdr W. T. Taylor May 1957 – February 1960	Wg Cdr A. J. Benson December 1971 – November 1973
Wg Cdr R. J. Fairbank February 1960 – January 1962	Wg Cdr W. J. Thorn November 1973 –
Wg Cdr W. C. Blakeley OBE January 1962 – July 1964	





## History and Development of School of Radio

'And you shall wander in the wilderness for forty years.'

*Old Testament  
Numbers Chap 14 verse 33*

And so the School of Radio, despite variations in name and functions, wandered 40 years before finally settling in permanent accommodation at Laverton in November 1974.

Radio training in the RAAF was first conducted at Point Cook in 1928. One course was conducted and 17 members graduated. No further courses were conducted by the RAAF until 1935.

School of Radio had its beginnings in the formation of Signals School at Laverton in July 1935. The RAAF strength then was about 900 with 96 first line aircraft. Radio training was carried out until the School moved to Point Cook in September 1939. The photograph shows the staff of Signals School in late 1939.



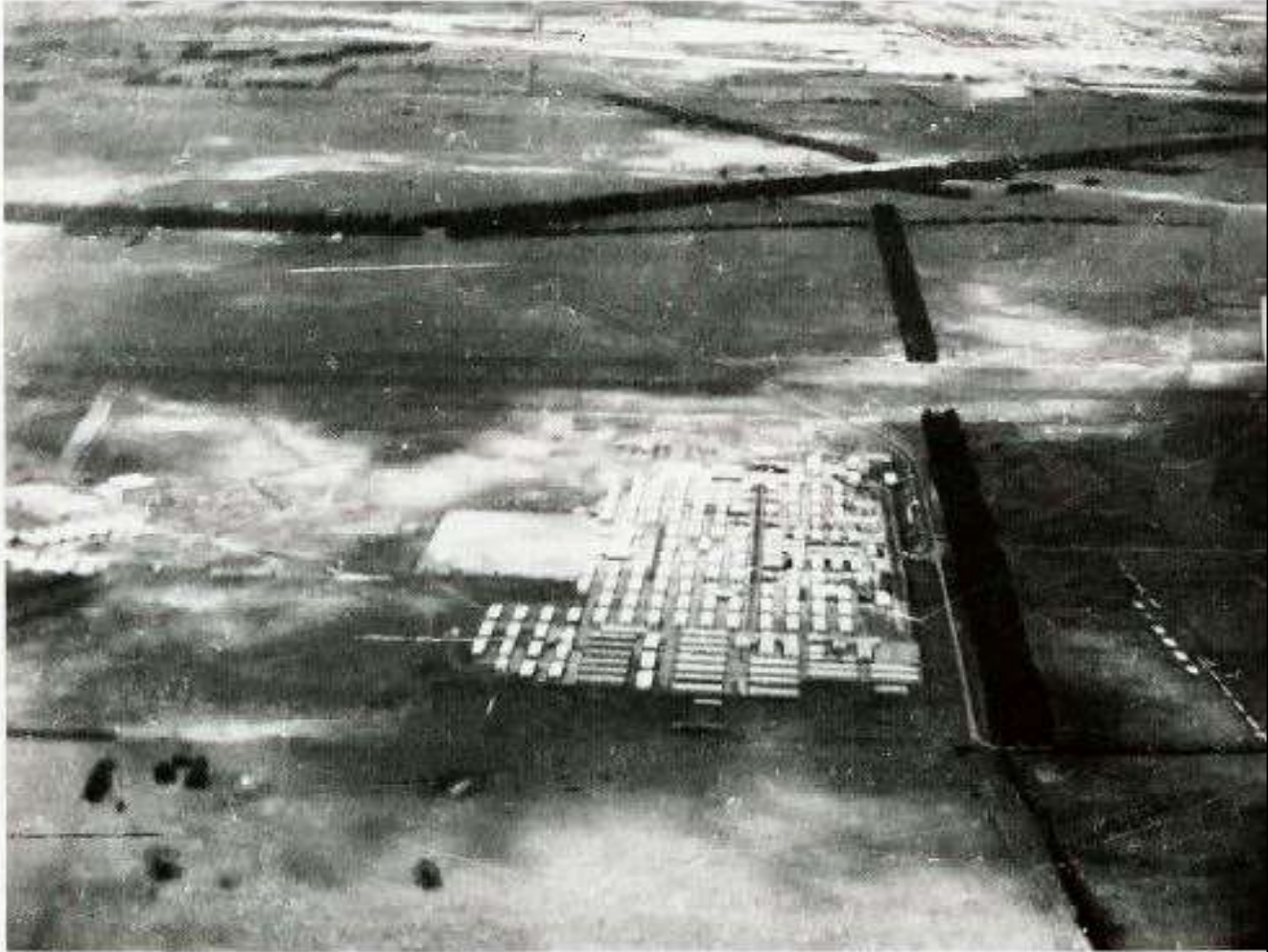
*'Staff of Signal's School under command of Flight Lieutenant A. G. Pither, Laverton, late 1939.'*

*Pictured are Left to Right*

*Back Row: Cpl Sinfield Cpl Hedrick Cpl Mansfield Cpl Murdes Sgt Austen Cpl O'Neill Cpl Gathegole Cpl Amor Cpl Jones*

*Front Row: Mr Fallon Sgt Reynolds WOFF DeBruyn FilLi Pither WOFF Bain Sgt Blakeley Mr Needham*

Signals School remained at Point Cook until it was disbanded in November 1945. During this period the School trained 8816 radio personnel, including 121 officers.



*'A & GRS (later RADS) Ballarat 1946.'*

In November 1945, the Signals School, Point Cook, and the Radar School, Maryborough, Queensland moved to Ballarat. The combined Schools took over the site, facilities and Signaller training functions of No 1 Wireless Air Gunners School (WAGS). No 1 WAGS had formed at Ballarat in April 1940 as one of the first schools of the Empire Air Training Scheme. During World War II, WAGS trained 5407 wireless air gunners and more than 2000 other personnel. The three units combined to form Air and Ground Radio School (A & GRS). This School was renamed School of Radio (RADS) in December 1952. The school was responsible for all radio trade and operator training plus the aircrew mustering of Signaller.





Continued maintenance of Ballarat was considered uneconomical and School of Radio moved to Laverton in April 1961. During the move, the Radio Apprentice School, which was formed at Frognall in 1948, was incorporated as a squadron of RADS and also moved to Laverton.

Although temporary accommodation of a minimum acceptable standard was made available by converting existing buildings, the eventual need for permanent accommodation was recognized.



*'RADS in situ at Laverton 1962, within bounded area.'*





Consequently, the requirement for a new school complex was raised in 1964 for inclusion in the 1965/66 draft design list. Tenders for the complex were called in May 1972 and excavation of the site (old RADS parade ground) commenced on 10th July 1972.

Signaller training (later Air Electronics Officer) remained a function of RADS at Laverton until it was incorporated into School of Air Navigation, and moved to East Sale in May 1968. The remaining RADS student population at Laverton has varied from about 250 in 1961 to a maximum of more than 700 in 1967. The present student population is 314. Whilst locations and accommodation change, trainees remain much the same (almost human). The first of the succeeding photos shows No 70A Radar course at Ballarat in January 1946. One of these members subsequently became a Commanding Officer of RADS — can you pick him? The second depicts No 80 Radio Technician course in front of the new complex in October 1974. Any wagers for a future CO?

*'No 70A Radar Course, Ballarat, January 1946.'*





*'No 80 Radio Technician Course, Laverton October 1974.'*

The tremendous efforts of many personnel, and many years of waiting for a permanent abode have borne fruit in the Complex shown below. Throughout its fragmented 40 years of wandering, between Laverton, Point Cook, Ballarat and back to Laverton the School has been forced to accept the cast off accommodation and facilities of other establishments. The new complex covers an area of 3.25 acres and has 77 offices, 81 classrooms, 7 workshops, a theatrette plus all associated domestic facilities such as tea and change rooms. Although the members who commenced training in the old RADS buildings will most appreciate the impact of the new facilities, future generations of trainees are now assured of permanency in a training environment second to none which will provide facilities in keeping with the growing complexity of electronic and telecommunications training.



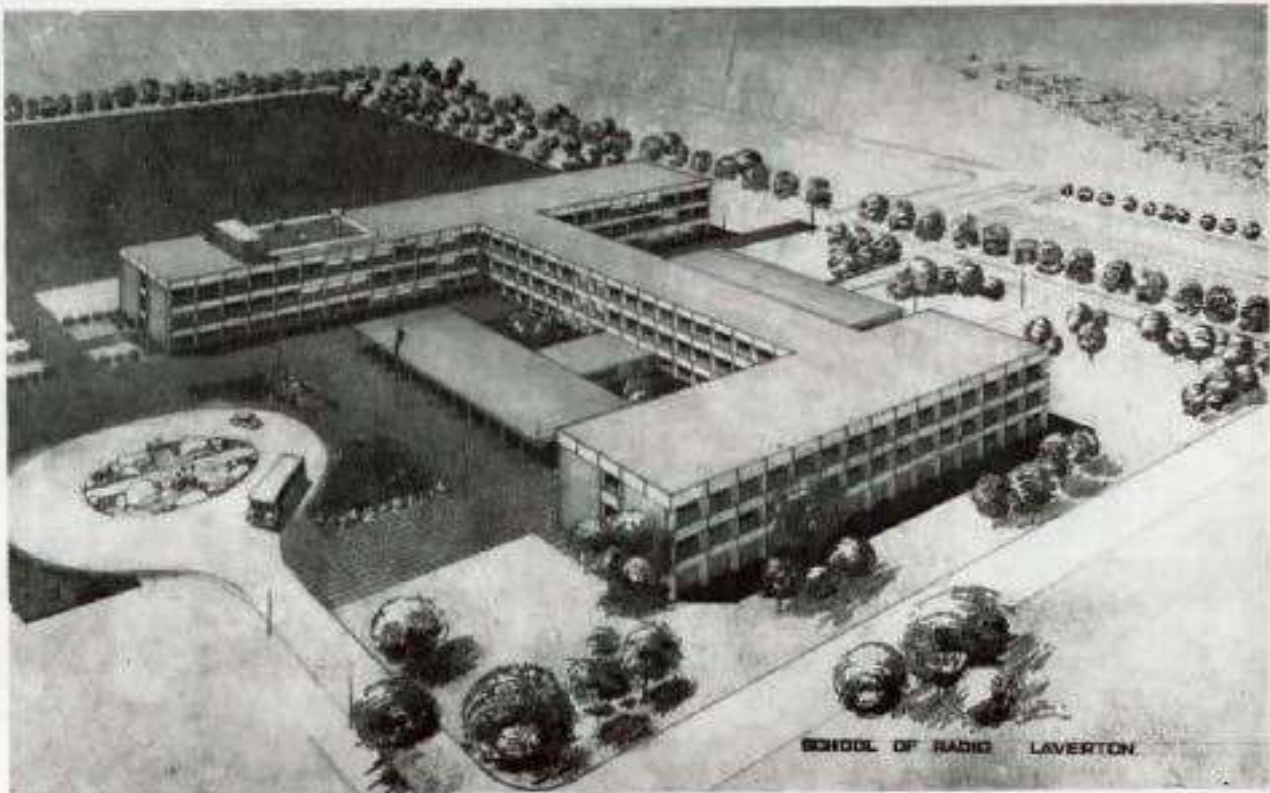


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'and the Lord has brought your wanderings to an end  
and has given you this place.'

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*Joshua 1 : 13*







## Opening Ceremony – Sequence of Events

- 2.10 pm All guests to be seated. Squadrons and RAAF Central Band march on to parade ground.
- 2.13 pm Squadron Commanders conduct a daily parade and inspection by squadrons.
- 2.30 pm Guests stand for the arrival of the Air Officer Commanding (AOC) Support Command and remain standing during the general salute.
- 2.32 pm AOC inspects the parade.
- 2.38 pm Officer Commanding Laverton welcomes AOC.
- 2.41 pm AOC delivers the oration and declares the building open.
- 2.52 pm Squadrons march past. The AOC takes the salute.
- 3.00 pm Official guests adjourn to the theatrette for afternoon tea. This will be followed by inspection tours of the Complex.
- 4.00 pm Messes and Clubs open for entertainment of guests.



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## A History of TAA Bristol Freighters flown in New Guinea

Ron Austin  
Bristol Captain  
1963-1966

This is a story of how it came to be that TAA pilots in New Guinea were flying 2nd hand freighter aircraft purchased from Pakistan.

Some background.

The introduction of Bristol Freighters into Pakistan was a political decision of the British Government. In 1948 the Pakistan Air Force had ordered a batch of Bristol Brigand fighters from England and then cancelled the order. The British demanded compensation and substituted the order with Bristol Freighters. These strange aircraft were unwanted but the contract was completed. A total of 71 Freighters, Mark 21s and 31s were ferried from England to the Pakistan Air Force and aircraft apparently did provide satisfactory service for their Air Force.



The majority were used for general Air Force operational flying but many were converted for special projects. Some were modified for VIP travel, five of them were fitted with spray equipment to spray plagues of locusts and several aircraft were modified in 1953 to carry a 4000 lb. bomb. These special "bomber" aircraft had been fitted with under wing hard points to carry the bombs

and had a clear plastic panel built into the bottom of the large front clam shell doors. One can assume, to be used with a bomb sight.



With this background, in 1961 Trans Australian Airline joins the story as part of the B170 history.

### **TAA Bristol VH-TBA**

Early in 1959 the Australian Federal Government had made a decision to replace Qantas, which operated within New Guinea, with the domestic airline Trans-Australian Airlines; they were to be the "carrier" responsible for all passenger and freight flights. At that time the largest aircraft Qantas used in NG was the Douglas DC3s. TAA soon realised that an aircraft larger than a DC3 was needed to move the heavy cargo expected to be delivered to NG in the near future.





Ansett Airlines (operating as Mandated Airlines) were also flying in NG in opposition to Qantas. It was decided that TAA and Mandated Airlines, as potential competing freight carriers in NG, would make a joint purchase, from Pakistan, of surplus Bristol Freighter aircraft. Australian crews flew these to Australia in 1961. There were three aircraft for MAL and 4 for TAA. After arrival, selected aircraft were serviced by their respective Airlines and then flown to NG. The aircraft for TAA were registered in Australia as VH-TBA, VH-TBB, VH-TBC and VH-TBD. TAA planned to use the first two in NG and to retain C and D in Australia for replacement parts. It was discovered that these ex-Pakistan aircraft were not the first Bristol Freighters to fly in NG.

In 1963, having been posted to New Guinea for 3 years, my flying endorsement training in NG was conducted by experienced pilots who were due to return to Australia at the end of their 3 year posting. They taught us, not only to find our way around the un-mapped Highlands, but also how to survive this different aviation environment while flying in the extremely dangerous mix of mountains, rocks and cloud.

During this introductory period on DC3's, as part of an overall endorsement, we were taught to land on the steep 8% slope at Wau.



Wau airport (above) was built by gold mining pioneer Cecil Levien in 1927. The first landing was by "Pard" Mustar in a de Havilland 37 belonging to Guinea Gold Airways, Lae. Shortly thereafter many aircraft types, including the giant Junkers G-31 tri-motors were landing huge loads at Wau in support of the mining operation. At 3,475 feet above sea level and with almost a 10% slope, it was an ideal New Guinea airfield. During January 1942, Japanese forces from Salamaua and via the Black Cat Gap attacked Wau and were defeated by the Australian Kanga Force. The Japs got to the bottom boundary of the drome and Australian soldiers, landing in DC-3s with artillery, pushed them back.

With the Bristol we learned to increase the engine power immediately on touchdown to maintain our rolling inertia up the slope to the top of the grass field. We then swung the tail around until the aircraft was facing across the slope. The locals native Bois would then duck in under the engines with the wheel chocks, fit them tightly against the front and back of the wheels and only



then, securely held, could we stop the engines. During discussion about the very steep slope on the field my instructor told a story of the Bristol Freighter which ran uncontrolled down the hill to crash at the bottom of the airport. He said “now it is used by the natives as a Boi house”

Recent research has uncovered the true story of this first Bristol in NG and its early demise. A demonstrator MK-1A, with registration G-AIMC, was prepared by Bristol in England to undertake a sales tour of Australia and New Guinea. It departed England in March 1947, arriving in Darwin after 19 sector stops on the journey. On take-off from Darwin for Melbourne, the upper access hatch behind the pilots broke off. I can relate to this as I also lost a hatch, having failed to check that it was locked after our radio had been serviced in Madang. In my case there was no damage but in the Darwin incident the “flying” hatch detached and damaged the tailplane. The demonstrator aircraft was repaired, and although this delayed the New Zealand tour, it commenced on July 1947. Back to Australia in October, the demo aircraft was serviced and then loaned to QANTAS New Guinea for evaluation. Qantas flew it up to New Guinea for trials.

*Loading aviation fuel drums.*

Part of the overall assessment was operating in the highland goldfields of NG. It made several flights into grass strips at Wau and Bulolo. On this day the aircraft landed up the slope and stopped at the top facing up the slope, not across the slope parking as used by other aircraft. After stopping, chocks were fitted under the wheels and then the parking brake was applied. However, in this case the nipple on the parking brake became detached from the brake lever and the aircraft ran backward down the hill with the personnel still on board. The engineer and one other jumped clear but the rest were carried down the hill and over a 20 foot drop at the bottom. No one was injured.



Apparently, the reason they did not park across the slope on this occasion was because previously the side parking method had been tried, but the effect of the slope distorted the aircraft fuselage and made it difficult to lock the front clam shell doors. On this occasion the nose up parking was tried as a remedy. On impact with the ridge, the fuselage broke in the region of the rear door and the aircraft was declared damaged beyond repair. All equipment, including the engines, was removed for re-use. The fuselage remained there on site and is used as quarters for native employees of an adjacent coffee plantation. The aircraft had only flown 250 hours and was valued at 50,000 pounds.

The two TAA operational aircraft commenced their flights in New Guinea (NG), VH-TBB in June 1961 and VH-TBA in September 1961.



The Bristol's large load capacity was required because the NG Administration intended constructing a road suitable for trucks, from Lae Township to Goroka and Mt Hagen located in the centre of the Whagi valley in the Highlands. This was a very major undertaking. For the project they needed trucks, bridge girders, bulldozers, tractors, graders and similar gear which could only reach the Highlands of NG in an aircraft as large as the Bristol.



Other non-government contracts were also planned, one being to move the components of a complete new tea factory from the Madang wharf to the town of Mt Hagen, located in the Highlands at an elevation of 5500. We discovered the purchase order to the manufacturers in England for the tea factory included the specification that "every component must be designed to fit inside a Bristol Freighter". When loading the 'factory' we found the large round condensers fitted into the aircraft hull almost like a cork in a bottle.

Other heavy freight items I have flown into the Highlands include complete D4 Caterpillar tractors; another was a road grader [stripped of its engine] but complete with the blade still attached to enable the unit to be unloaded with our portable ramps at destination. When carrying trucks as cargo, the wheels were often removed and they were rolled in on their brake drums. This reduced the height of truck to enable it to be moved far enough into the hull, below the wing structure, to be able to shut the door. Our cargo staff became quite versatile at finding solutions to loading difficulties!

In preparing the aircraft for NG operations, some upgrade modifications were completed in Australia by TAA to improve the overall safety of the proposed operations. A major change was to remove the Bristol brakes. Originally, they were fitted with typically English un-reliable air activated bag brakes and TAA replaced them with DC6 hydraulic brakes. To actuate these new brakes a converter was fitted which turned the original air pressure brakes into hydraulic pressure. The original air brakes had already dangerously failed during a training flight at Mangalore airport.

A hair-raising story of this brake bag failure was later described by Captain Ivan Neil.

When the aircraft first arrived in Melbourne, Ivan was one of two new Bristol Captains being converted to the type under the supervision of a senior TAA check pilot. During this conversion training at Mangalore, when the 2nd trainee was in the Captain's seat doing circuits and landings, Ivan decided to watch a landing by lying down below on the floor of the cargo hold and looking through the Perspex panel fitted into the lower part of the door. After a smooth touch down, the brakes were applied and the pressure bag in one-wheel brake failed. Ivan hung on to the floor as well as he could while the aircraft turned left, ran off the edge of the runway then was steered, by rudder, back onto the hard stuff. Ivan said he would never go down there again.

D





When all necessary work was completed the aircraft were flown to Lae to commence the freight operation. TAA made a decision that the first flight in NG would be celebrated by an invitation to all local dignitaries. At the insistence of TAA management, Captain Neal departed for this flight in very marginal weather conditions. Immediately he departed the Tower declared "Lae airport is closed to all operations". Shortly after, on climb out, one engine failed and had to be shut down. Capt. Neil advised by radio "returning to land at Lae". The tower advised him the airport was closed and his reply was "Well, I am just about to reopen it." This was typical of Ivan's very positive approach as a Captain. All ended well.

Later the two Bristols were based in Madang as this town was the centre of the freight transfer into the interior of NG. The advantage of the airport at Madang was being adjacent to a cargo wharf and closest to the airstrips in the Highlands. The airport had a single runway used for all departures and arrivals and was sealed with bitumen. Most of the other landing strips used by us in the Highlands were either loose dirt or grass which was very slippery when wet. Many strips were one-way operations; you land uphill and then take off in the reverse direction, downhill.



The TAA pilots required to fly the Bristol in NG usually completed a ground theory course in Australia before their posting. The in-flight training for the endorsement was conducted in Madang. Those pilots converted to fly the Bristol soon appreciated the suitability of this aircraft to carry freight, it was easy to load and unload and the power/weight ratio was superior to the DC3's making it much safer to fly in marginal conditions.

The large Bristol Hercules sleeve valve engines were powerful and rather more complex to handle than the DC3 Pratt and Whitney engines. First flight of the day required a very long idling period to raise the temperature of the thick engine oil to a satisfactory viscosity. To start the engines at the high-altitude strips, the priming of the fuel system was radically different to the procedure used to start at sea level. We could not rely on the petrol gauges fitted in the aircraft



because, after refuelling, the small quantity of fuel we carried could only be reliably guaranteed if the total in each tank was measured by hand with a wooden dip stick. This task usually fell to our young First Officers. After each refuelling at Madang the F/O's would climb past the radio rack behind the crew seats, open a hatch and climb out on top of the fuselage. From here it was a dangerous walk along the top of the wings to reach the fuel caps and check the quantity of petrol with the dip stick. When looking into the large wing tanks the amount of fuel in the bottom always seemed tiny. For the First Officers there was a very real danger of slipping off the wing or the fuselage top. This was in 1963 and would not be allowed in today's Health and Safety requirements.

Our Engineers coped very well, with absolutely minimum equipment, with their job of keeping the Bristol's flying. Most daily maintenance was done in the heat of the sun, without any cover for shade. A partial solution to this was to keep their spanners cool in a bucket of water while working in the open.

*Pushing the aircraft up to the ramp  
to unload motor vehicles.*

We experienced many serviceability problems not expected by the designers. For example, the tail wheel had an electric solenoid lock that could be released for taxiing and then before take-off it was



locked to help keep the a/c straight on the runway. When landing and taking off on wet grass strips in the Highlands, the mud would cover the solenoid. During the flight back to Madang the mud would solidify and after landing, on some occasions, the electric solenoid was not strong enough to withdraw the lock and enable us to swing the tail to taxi. This fault required the aircraft to remain on the runway while the First Officer exited by the top hatch, walked down the fuselage and jumped off at the tail. He then lay on the ground with the aircraft fire axe and hammered the locking pin to loosen the mud. This problem was probably unknown to the Bristol designers.

Another incident may illustrate how the lack of freight handling equipment affected the job. On one flight two large steel underground fuel tanks were carried to a grass strip at Minj which served a tiny coffee growers' district. The cylindrical tanks were loaded in Madang using fork lifts but we had no such equipment at Minj. After some discussion, the agent made contact with the local Patrol Officer. One of this Officer's responsibilities was supervising the Bois in that district who were committed to jail for minor offences. He appeared at the airstrip with 27 of these men from the gaol. Having rope available in the cargo bay, we formed a bridle around the back of the tank, attached 2 long ropes to this, and with 13 Bois pulling on each rope they extracted the tank from the hull pulling, in unison, to a loud sing-sing cadence. These rhythmic chants were similar to the method used by the wind jammer sailors when hoisting sails, singing and pulling.

The first tank fell to the ground and was rolled away. The second now further down the sloping fuselage, was more difficult. One rope broke, spilling our willing assistants in a heap, but, with much laughter and a reef knot repaired rope, they extracted the second tank. Because of the



longer ropes, when falling to the ground, this tank lacked directional control and rolled sideways. The tank fell against one open front door.

Before departure, when closing the doors, we found, with the distortion of the door, the locking dogs to secure the door could not be moved over centre into safety. Obviously we could not fly in this condition, so after more discussion, the solution was to place half the number of Bois on the outside of each door to force them tightly together so the locks could be moved into safety. We then returned to Madang where our Engineers, after our explanation, took great care unlocking the dogs before readjusting the geometry of the swing doors.

Completion of the road to Mt.Hagen did reduce the quantity of air freight required to be carried from Madang into Goroka, Mt Hagen, Minj, Banz, Baiyer River and the other major towns. We seem to have created a rod for our own backs by lifting all that heavy gear into the highlands. The transport system could now run without the assistance of the Bristol Freighters.

To conclude, in 1967, after 5 years of intensive work in NG. TAA decided to remove the Bristol aircraft from New Guinea and sell them in Australia, to Air Express. Of our two Madang based aircraft, VH-TBB continued flying with Air Express and VH-TBA was stripped for spares in Brisbane.

## Super glue.

Super glue is something we just take for granted, you can get a pack of 6 or so tubes from Bunnings for about \$2.00 and it works wonders, sticks most things together almost instantly, but what is it and how is it made. See [HERE](#).



**It's been such a joy  
being home with my  
wife the past 3 weeks.  
We've caught up on all  
the things I've done  
wrong the past 30  
years.**





## How to unload a Boeing – by hand.

Maurie Baston

Maurie Baston spent 18 years in the Air Force as a pilot. After the RAAF he flew Convair 880's with Cathay Pacific Airways in Hong Kong before returning to Australia, eventually setting up his own company: Air Transport Management. He still flies his own Piper Twin Comanche, and operates an aviation consultancy business based in Australia and the USA.

As pilots, we are mostly focused on our own flying skills but, as time passes, many of us come to realise, while we do have the important flying skills, there are other skills we lack that have been solved by automation. But automation cannot always solve some of the out-of-the-ordinary events that can occasionally happen, especially when external assistance is not available.

There is the old pilot saying that states, "Make sure we don't have to show our ace-like abilities, just give us an aircraft that doesn't break." Such is the value of engineers and support people who make our aircraft serviceable for us to safely go on our way. But, and it is a big "but," the technology we now enjoy has done wonders but is it good enough to solve some situations that can result in an accident or incident that can occur requiring other skills we wish we had?

Not always!

A side effect of technology and automation is the demise of the Flight Engineer. The first exits from the flight decks were the Boeing B767 and B747-400 and other Airbus aircraft. While there are excellent arguments supporting such developments, there were always advantages in having a flight engineer aboard to assist us pilots in "managing" a flight, not just doing the flying.

Flying from Nauru to Honolulu meant flying past a number of famous islands, like Christmas Island. Such was the situation I experienced when operating a B-727 from Tarawa to Honolulu in the 1980s. The trip over was routine, passing Howland Island where Amelia Earhart has been thought to have landed and then we flew onto Christmas Island. In those days, operations were somewhat primitive: a battery-operated NDB at destination, neither was there Air Traffic Control or a local Air-Ground operator but navigation was good with the on-board INS and Omega backup. For me, the Pacific was the greatest geography lesson I could ever have wished for. Places like Nuie, Kosrai, Funafuti, Atataki, Wallis Island and, to my surprise, towns named Paris and London on Christmas Island.



Much history has been made on the Christmas Island route during World War II. The departure airport at Kiribati was Tarawa/Batio where many thousands of casualties occurred on both the American and Japanese sides in the fighting. In the four short days, 20–23 November 1943, nearly 10,000 were either killed or wounded and of course we will always recall the infamous



Japanese raids on Honolulu on 7th December 1941. The flight to Honolulu was routine; six hours at long-range cruise along the equator from Kiribati; abeam Howland island and on to Christmas Island (Pacific) then to Honolulu for an overnight return.

On this particular flight, apart from passengers returning to Kiribati, there was the normal freight of baggage and building materials, but a new addition this time was a small truck. The combi B727 was a flexible aircraft: quickly converted to an all freighter configuration, a VIP one, or in this case the forward area was configured for freight, with an all-economy section in the rear. All loading was complete and after I had ascertained there was the required unloading equipment at Christmas Island, I signed the Weight and Balance Load and Trim sheet and we departed. The first return sector was normal, we duly arrived on time at Christmas Island and all was routine until the ground personnel told us they were unable to unload the truck. That would mean we would need to take it on to another destination where unloading facilities would be available. The situation was the fork lift machine was not heavy enough to support the load and was toppling when attempting to lift the truck clear of the aircraft's floor. What's more, there was danger the forklift would topple into the side of the aircraft and that would have meant some serious explanations.

This was a situation I had experience before during a flight from Auckland to Honiara. The whole cabin was converted to freight, no seats, and a massive carpet was loaded for the Honiara Mendana Hotel. As at Christmas Island, it could not be unloaded so we carried it to Nauru where it was unloaded and sent back to



Honiara by ship, a costly exercise for someone. Meanwhile our Flight Engineer, Jack Reilly, had several suggestions. Jack was an ex-RAAF Flight Engineer and very experienced in ways that few of us pilots knew about. Jack knew the consequences of not unloading the truck and I watched him as he called some of the locals to an on-field conference.

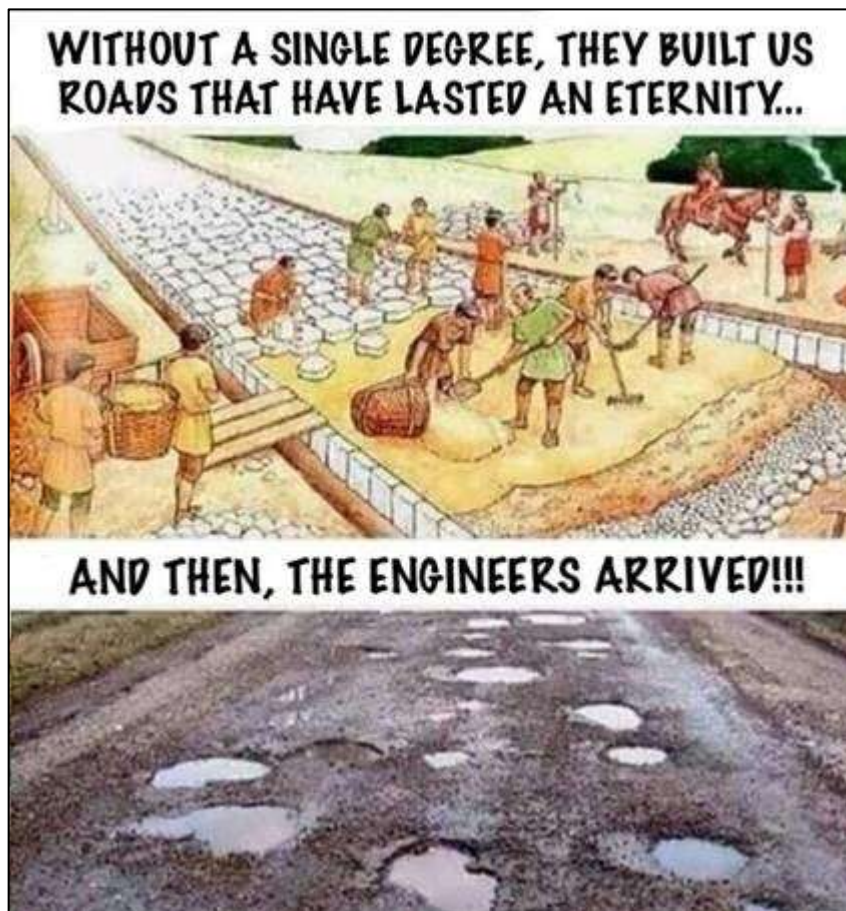
"I want you to get me three things," he said. "Firstly, I want the biggest, thickest ship's hawser (rope) you can find and I want it at least 30 feet long. And with the hawser I want six of the heaviest Christmas Islanders you can find...And... I also need a team of tug-of-war players, as many as you can get to volunteer." I had no idea what he had planned and when I asked, he said, "Not a problem. She'll be right, Just need some muscles."

Soon the aircraft was surrounded with many locals and amongst them were the biggest, heaviest islanders I have ever seen. Also delivered in a very large semi-trailer was the required hawser, several of them. Meanwhile Jack had gone to work under the aircraft and proceeded to disconnect the nosewheel steering unit. The unit was always disconnected when the aircraft was to be towed and could fully caster. After a tug operation, a pin was simply re-inserted and steering was then normal.



Next Jack marshalled the tug-of-war team on the opposite side of the cargo opening; then positioned the hawser around the nosewheel and on the count of “three,” commanded a practice pull... sideways! It worked. The nosewheel castored and the aircraft moved sideways about two feet. But now the real test. Carefully the fork lift was positioned as close as possible to the aircraft and gently the forks were raised to the bottom of the pallet. Jack positioned the heavy men on top of the fork lift, some sitting in each other’s laps and slowly the fork lift started to raise the truck just two inches high. Jack shouted “Pull...Pull....Pull,” and slowly the aircraft moved sideways as the truck remained suspended high and clear of the aircraft and then slowly lowered.

“There you go... Where do you want it?” he said. Such is the value of a Flight Engineer.







## John Laming.

Aeroplanes and other stuff.

During my 18 years in the RAAF 1951-69, as a secondary appointment I was the unit flight safety officer at 34 Sqn and was the Command Flight Safety Officer at HQSUPCOM. I was also at DFS for a few months in 1969. We used to receive flight safety magazines from the RAF and USAF. One US magazine was the Military Air Command Flier. These magazines were much better and more interesting than the RAAF Spotlight flight safety magazines.



One issue of MAC Flyer contained the attached story. I loved it and kept a copy. I've reproduced it below.

### THE GHOST OF THE DRIFTERS' REEF

I am sure many of us have read stories about flying that grabbed our attention. Books about Biggles and Tin-Legs Bader were my early favourites. During a recent clean out of my shed I found a story about a flying ghost written in 1968 by a United States Air Force pilot, Major Grover C. Tate that had been submitted to The MAC Flyer – a military flight safety magazine. I must have saved that story from the time I was in the RAAF which included 1968. For those born after that era here is a little background to the story.

At the end of the Pacific war in 1945 the Americans maintained military bases in the Far East, including South Korea, Okinawa, Guam and Japan. These were supplied by aircraft of the USAF Military Air Command (MAC) from Travis Air Force Base in California flying over the Pacific and refueling at Hawaii, Midway Atoll and Wake Atoll. Others landed at Guam for the final leg to Japan.

Today, C-5 Galaxy and C-17 Globemaster III heavy jets bypass Wake and Midway, but in the Fifties and Sixties, Douglas C124 Globemasters and C-133 Cargomasters made several island stops including Wake Island on the way to Korea, Japan and Clarke AFB in the Philippines. Wake is a tiny coral atoll in the North Pacific with a coastline of 12 miles and located about two-thirds of the way between Hawaii and Guam.





## USAF C-124 Globemaster



The C-124 with its four 3000 plus hp [Pratt & Whitney R-4360](#) 4 row, 28 cylinder engines flew un-pressurized and generally below 10,000 ft. Early model Globemasters did not have weather radar and thunderstorm penetrations were common. To cap it off, engine failures could be critical considering the distances between land. There were no satellites; navigation being by long range high frequency radio aids as well as celestial navigation by a specialized navigator using a sextant while plotting the sun and the stars. The crews of these long range four engine propeller aircraft usually consisted of two or more pilots, navigators (nicknamed the 'gator'), flight engineers and loadmasters. (See [HERE](#)).

Now 40 years since the story was first published, the author later added a sequel published in the MAC Flyer in 1988. Here is his story called The Ghost of Drifter's Reef - the name of the saloon bar on Wake Island. It starts with the MAC Flyer editor's comments in 1988.

*Twenty two years ago, the MAC Flyer published "The Ghost of Drifter's Reef". Recognized then as an exceptional and winning submission to the writing contest, we hope you'll agree it was an entertaining work of poetry with a safety message that sticks with its readers forever.*





*This year (1988) the same author has graciously provided the sequel, "Retired with Honor." Many of us have yet to down brew at the infamous Drifter's, in fact we probably never will. Furthermore, a lot of things have changed in the last 22 years and many crew-members who frequented this fabled saloon aren't flying with MAC anymore, therefore, we have reprinted the original poem with this year's submission, and extend a warm invitation to enjoy."*



### THE GHOST OF THE DRIFTER'S REEF

By Major Grover C. Tate ((USAF, Ret), Joshua, Texas

A bunch of MAC Flyers were whooping it up  
On the shore of the Wake Lagoon,  
Gathered together for story and song  
In the Drifter's Reef Saloon.

Grousing at rules that kept them there  
Instead of in Hono-lu;  
Counting the hours remaining to drink  
(How many? It's twelve plus two.)

When out of the rain and storm of the night,  
And into the white lamp's glare,  
There stumbled a man in raggedy greens  
With sand in his beard and hair.

He looked like a crewman because of his garb,  
This salt-encrusted, storm-ravaged guest,  
Some threads from a MAC patch, so faded and torn,





**A sharp eye could find on his chest.**

**The place grew quite still as he walked to the bar,  
And croaked out an order for gin.  
Then clutching his glass in his coral-scarred hand,  
He eyed every man jack therein.**

**His eyes were of green, like the depths of the sea,  
And they looked as though set in a well.  
And those orbs had a message for all who could see  
That this man knew the torments of hell.**

**The hand raised the glass, and his lips found the rim;  
A thin trickle poured down his chin.  
Then, smoothing his beard with the back of his wrist,  
He coughed and said, "Let me begin."**

**"It all started back in the days of cadets,  
In the years before black shoes and blues.  
Instead of me choosing to fly like a man,  
I majored in women and booze."**

**"I guess I was lucky; I know I got help,  
And somehow I made my way through.  
Then one sunny day someone pinned on my wings  
And told me "It's all up to you."**

**"Of all of the places I could have been sent,  
Like Training Command, TAC or SAC,  
They gave me the job that I wanted the most –  
I'd spend my years flying for MAC**

**"And when I checked in, Oh! So eager to start,  
They scheduled me back into school.  
But I was a hot rock and I knew it all,  
So I spent my time at the pool**

**"To heck with procedures for three-engine climb,  
It's easy to see we got four.  
Just line up this beast with the wind on her nose  
While the engineer lays on full bore**

**"Who cares, reasoned I, where the fuses are hid,  
Who cares for the words that spell PAM?  
Just show me about where the throttles are at,  
And it's off to the blue, like Shazam!**

**"It's never my worry to preflight the bird;**



Leave that for the maintenance toad.  
And get him to sign off those silly red marks;  
We must get this show on the road.

“And all of this jazz about planning the flight!  
Half-way makes a good ETP.  
Just tell me, old boss, where the cargo must go  
And leave the flying to me.

“At last I returned to my unit again,  
And begged them to please let me fly.  
They needed a man on that very same eve  
To go bore a hole in the sky.

“The night was as black as a coal miner’s sock,  
When our plane roared away toward sea.  
Then the nav stuck his hand through the drapes at the back  
With a message to give M-C-C.

“I glanced with surprise at the words on the sheet,  
Which the ‘gator said *had* to be sent,  
“cause the place we were going was known to all hands,  
And so was the time we had went.

“So I laid on top of “Procedures, En Route,”  
And wadded them all in a bunch,  
Then I tossed it aside while I leveled her off  
And called for my first in-flight lunch.

“In the mellow white light from the thunderstorm lamp  
I glanced at the man ‘cross the aisle.  
I knew in a flash that we’d sure get along,  
‘Cause his face held the trace of a smile.

“His arms dangled down by the side of his seat,  
His chest made a rest for his head.  
And the sound of his snores as we bored through the night  
Gave me confidence I couldn’t shed.

“It was only an hour, as best I recall,  
When: “Pilot, we’ve lost number 2”  
Came crackling over the interphone wire;  
I instantly knew what to do.

“Press on, I replied, in my best pilot tone,  
Four minus one still leaves three,  
“But sir”, came the voice of our first engineer,  
“Let’s go back to Travis, prithee?”



“Quite right,” said the ‘gator, quick joining the fray,  
The book says go back toward the sun.”  
“What book, lad?” I asked in a fatherly voice.  
His answer: MAC Fifty-Five One.”

“The equal time point still lies over our nose;  
Make a one-eighty, please”, cried the nav,  
“We’re going to Hickham, Magellan,” I yelled,  
And no more of your lip I will have.”

“The silence right then was a welcome relief,  
And for minutes the feeling was grand,  
Then a voice said”Our fuel isn’t going to last,  
You’d better start looking for land.”

“Then the ‘gator chimed in with a worrisome note,  
“Pardon me; you’re three AIREPS in debt.”  
I took a deep breath, then in leadership tones,  
Answered, “Gentleman, negative sweat.”

Behind us the dawn was attacking the night;  
We flew on in an ocean of grey.  
The clouds which had covered the stars from our sight.  
Now were hiding the sun the same way.

The man on my left shook himself from his snooze  
And requested the last status quo.  
I flashed him a sign that okay was the word  
And we only had three hours to go

I told him one engine was taking a rest,  
And fuel was not overly fat,  
But we had a heading that seemed almighty good,  
And he could take comfort from that.

I mentioned the AIREPS that hadn’t been sent,  
The radar that acted so sick,  
The fact that the ‘gator had lost his Loran,  
The radio’s clickety-click.

I knew by the way that he sagged in his seat,  
That to him it must all be a joke.  
(T’was later I learned from a medical tech,  
That the poor chap had suffered a stroke.)

To wrap it all up in a couple of words,  
And to save you the gory remarks,





We DR'd our way to some ATC steers  
And managed to outfox the sharks.

I greased in the bird on the runway they named,  
Then taxied her in to the ramp.  
The fellers that met me when I touched the ground,  
Had hands awful clammy and damp.

They read me the regs I had broken and bent,  
They showed me the rules I'd ignored.  
They hit me with everything under the sun,  
And left me, quite lit'rally, floored.

They tied me with chains on my hands and my feet;  
I was laid in a casket-type box.  
Then they fastened the lid with a handful of spikes  
And they wrapped on more chains, using locks.

Ten hours in the back of a One-Twenty-Four,  
Then they pitched out my coffin near Wake.  
The box split in two as it hit on the reef,  
And I floated ashore like a snake.

No one sees me here but the members of crews,  
'Cause to them I'm a lesson retold.  
I only appear in the dark of the night,  
When the weather is low, damp and cold.

And so, my MAC friends, buy me something to drink,  
Heed my story of ruin and rack.  
Please remember the man who goes forth without smarts  
Will eventually never come back.

He paused; in a flash someone refilled his glass  
And he gulped down the drink with a smile.  
Then he left as he came, in a flurry of wind,  
For his home on the tiny Wake isle.

I am sure he's still there, this outcast from a crew  
With his raggedy greens and his beard.  
And whenever you sit in the Drifter's Creek Bar,  
Keep an eye peeled for something quite weird.

For I reckon he'll never be able to leave  
Until all our men get to look.  
And to hear him recite his sad, heart-rending tale,  
Of the man who knew more than The Book



**THE SEQUEL - RETIRED WITH HONOR  
A follow-up on an old story**

**In the castle by the river  
In sainted old DC  
Papers were being shuffled  
Among the troops in AD (administration)**

**It was on a Friday afternoon.  
The weekend was on hand  
When the halls echoed a loud scream  
Heard throughout the land.**

**Who the hell filed this form?  
Asking for retirement this day?  
Some nut living on Wake Island  
Wants retirement plus 30 years backpay**

**The listed name is just plain "Ghost"  
Address is Wake Island Lagoon  
Place of duty is listed  
As the Drifter's Creek Saloon**

**Claims that he once was a pilot  
Who made one tiny, tiny mistake  
That he was tossed out in a box  
In the surf of the island of Wake**

**Now, after all of these years there  
Wants retirement and a parade  
The silliest request for retirement  
That has ever been made**

**Throw all these forms away  
Put them in the burn sack  
This obvious, ridiculous counterfeit  
Is the work of some quack**

**Just as the AD guy gave this order  
A four-star with ribbons galore  
Caused a call to attention  
As he strode through the AD room door**

**What's all this shouting and racket.  
Coming from this paperwork den?**



The AD man retreated, cowered,  
And then sadly began

He told of the ghost story,  
Of the retirement plan prank  
Of how after 32 years service  
The ghost was still a lieutenant in rank

The general's eyes grew very hard  
And he tightly gritted his teeth  
Is this man by any chance  
The Ghost of the Old Drifter's Reef?

Assured that the form said only Ghost."  
The general broke in broad smile  
And announced he knew this man  
Assigned alone to Wake Isle

Oh, he was ragged and dirty,  
Wore a tattered old MAC patch  
Hair and beard matted with salt and sand  
Sandals that didn't match

He was thrown out on that island  
By the crew of an old -124  
Sentenced to be there forever  
Never to fly anymore

He had screwed up at every turn  
Compromised safety and crew  
Then dumped out on lonely Wake  
With nothing but one thing to do

He had to meet each incoming flight  
Share a drink and startle all there  
Teach each aircrew that flying  
Was more than a wing and a prayer

His messages were handed down  
By all the thousands who passed through  
Telling over and over that flight safety  
Was primary to each and every crew.

He always ended his bar room lectures  
With a lesson well-learned  
That he who flies without smarts  
Is doomed to not return





Now the jet crews pass tiny Wake  
Where he wanders all alone  
He has served his assignment  
Let's bring the old boy home

Give this man the meritorious medal  
The general ordered, signing the request  
For among all the flight safety officers  
The old ghost was the very best

Give him all the benefits  
Send them to Wake Lagoon  
The old MAC ghost served with Honor  
In the DRIFTER'S CREEK SALOON.



The irony of life is that by the time you're old enough to know our way around,  
you're not going anywhere.



## A Date with Juliet.

Flight 420, a Boeing 737 to Hong Kong, departed from a small island on the Equator at about the same time as an unnamed typhoon was born 2,000 miles further west. The depression that spawned the typhoon had been tracked by U.S. Navy weather satellites for several days. As it slowly spun in a westerly direction from 500 miles north of Ponape in the Carolines, the weather forecasters decided it met all the attributes of a maturing typhoon and from a list of names, selected Juliet.

The captain of the flight was an ex-Royal Australian Air Force pilot who had served in Vietnam. The first officer was an experienced ex-GA pilot, who had joined the company from flying Navajos. The remainder of the crew consisted of four stewardesses, who were recruited from island republics in the South Pacific. Two were from Fiji, one from the Solomon Islands, and one from Samoa. The flight was scheduled to depart from its island base at 0130 local and as usual, the aircraft finally got airborne from runway 33 half an hour late. This was due mainly to a relaxed, informal handling agent who worked practically single-handed to get the 60 passengers underway. The Boeing 737 would touch down at Guam four hours later after a 1,800-mile trip, passing 150 miles to the south of Ponape in the Caroline Islands and an hour later 60 miles to the north of Truk Lagoon.

During the Pacific war, Truk was a major naval base for the Japanese fleet and a forward headquarters for the Japanese during their drive southward towards Guadalcanal and New Guinea in 1942. Now it is an underwater photographer's paradise of sunken warships. I was staying in the Hilton hotel at Guam and received a phone call from our company agent advising that the aircraft was late. Because communications were not always reliable between incoming aircraft and handling agents, I decided to get to the airport half an hour before the aircraft was due. I was particularly interested in the position of Typhoon Juliet although it was still far enough east of Guam as to cause no immediate weather problems for our departure at 0500 local.



Because communications were not always reliable between incoming aircraft and handling agents, I decided to get to the airport half an hour before the aircraft was due. I was particularly interested in the position of Typhoon Juliet although it was still far enough east of Guam as to cause no immediate weather problems for our departure at 0500 local.

In two days time, it could well be astride our return route to Guam from Taipei in Taiwan. The planned alternate for Guam was the island of Saipan, the scene of bitter battles during the war. The chances were that Saipan could be affected by the typhoon, as the airport was only 80 miles north of Guam. In turn, this meant our payload could be restricted out of Taipei, in order to carry an extra three tonnes of fuel to reach Truk, which was well out of the typhoon's probable path. It was all too hard for me at that early hour of the morning, and I decided to cross that bridge when I came to it.

Flight 420 landed at Guam and the incoming crew disappeared to the Hilton to rest and await our return two days later. We refuelled to full tanks, loaded more passengers, and departed under



the watchful eyes of the United States radar controller for the next sector to Manila. Previously, I had telephoned the U.S. Navy weather forecaster who had predicted that Typhoon Juliet would probably pass between Saipan and Guam itself in 48 hours time. Bloody great, I thought...just in time for our arrival.

The sun rose behind us as we climbed at Mach 0.7 to 31,000 feet and we received the usual cheery farewell from the radar controller as we passed off his radar scope two hundred miles away. Little did we know that two nights later, around midnight, amongst lightning and thunder, we would be relying heavily on that polite gentleman to keep us out of the storm brewing to the east.

En route Guam to Manila, we passed well to the north of the beautiful remote islands of Yap and Ulithi. [Ulithi Lagoon](#) was a huge US Navy base in 1945, supplying the fleets for the Okinawa campaign. Yap NDB gave good bearings and we confirmed the accuracy of our position with the combined use of INS and Omega VLF. Despite the feeling of early morning fatigue, both the First Officer and myself could only sit back and gaze at the dawn of a new day, with the rosy pink hue of the clouds below, the occasional towering cumulonimbus clouds and the vastness of the blue Pacific. The Inertial Navigation System (INS) steadily clicked up the passing of meridians of longitude and I plotted the coordinates on the Jeppesen chart. It was probably an unnecessary chore, but it kept my conscience clear. It is all too easy to lapse into complacency, when one is tired.



We turned a few degrees starboard for the last few hundred miles of the air route to Manila and called Manila Control on HF for a clearance to enter their air defence zone. Penetrating the ADIZ without a clearance was not a good thing, because one could be arrested on arrival at Manila, with little option except to bribe oneself out of trouble. We could even be buzzed by an intercepting fighter, if the Air Force could find a serviceable one!



A small cross on my chart reminded me that we were now passing high above the final resting place of the U.S. cruiser Indianapolis (Click the pic), which was the last major warship lost in World War II. It was torpedoed by the Japanese submarine I-58 on 30th July, 1945, in the closing stages of the war. It was the Indianapolis that had transported the two atomic bombs from USA to Saipan, from where they were dropped by B29 bomber on Hiroshima and Nagasaki. From Saipan, the cruiser had sailed to the Philippines and had been sunk on the return voyage to Guam, with the loss of 800 lives. In the many hours that I flew over the Central Pacific, I never

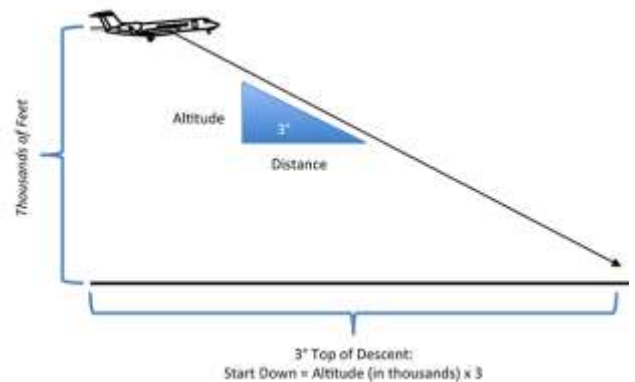




failed to quietly think of the ships and their crews who died in naval battles far below. I think many peacetime aircrew who fly the Central Pacific routes probably feel the same way and it hits one most as the sun rises in the eastern skies, reflecting on the peaceful scene of hundreds of cumulus clouds. Like miniature fairy battlements of cotton wool, they floated above the brilliant hues of coral reefs which appear magically in the distance and slowly pass from view under the wings. It is often a time for reflection.

The First Officer flew the approach into Manila. As usual, we were held high at 4,000 feet by Manila radar, until only a few miles from the runway. This meant slowing the aircraft to the approach configuration early enough to avoid hurried last minute lowering of flaps and wheels. This annoying problem occurred because ATC were constrained by strict noise abatement rules over the suburbs of Manila. Heaven knows, Manila was already a city of noisy buses, trucks and cars, so noise abatement for aeroplanes was a bit of a joke.

The twin needles of the ILS came together nicely and we touched down at 125 knots, only to be subjected too much swaying and bouncing on the uneven runway. A few months previously, I had flown into Manila for landing on runway 24. ATC had again delayed our descent from 4000 feet, which should have put us uncomfortably high on glideslope. Now the ideal angle of approach for most jet aircraft is 3 degrees. This allows a reasonable compromise between an acceptable rate of descent of around 800 fpm and ease of flyability. Anything more than 3 degrees involves a high rate of descent near the ground and a lot of inertia and energy to be changed for the round out for landing. What puzzled me at the time was that the glideslope needle showed that we were on the correct angle of 3 degrees. This was clearly incorrect, because at our distance from touchdown of 7 miles, the 3 degree slope should have intersected our path at 2100 feet, yet we had only just left 4000 feet. I suspected that the Manila ILS ground equipment was faulty and that in fact we were flying down a false glideslope of at least 5 degrees or more. A quick check of our rate of descent of nearly 1,600 feet a minute, twice the normal acceptable safe amount, confirmed my thoughts. I decided that if the aircraft was not stabilized and nicely set for landing by 500 ft. we would climb away for another more leisurely approach, using a different navigation aid.



We broke out of cloud at three miles from the runway and concentrated now on establishing a reasonable glide path by switching attention from the instruments inside the aircraft to the lights of the VASIS (Visual Approach Slope Indicator System). These are placed either side of the runway and give a varied pattern of different colours to indicate that the correct approach angle is being used. Both the F/O and I were surprised to see a meaningless jumble of lights from the VASIS, and I thought to hell with this nonsense and completed a normal landing, albeit further down the 11,000 ft runway than desirable. As the 737 was being prepared for the final leg to Hong Kong, I phoned Manila ATC and suggested that they take a look at their ILS system as it seemed well outside acceptable tolerances. Additionally, their VASIS was up the creek. I found out later that the VASIS installation (several boxes of lights attached to concrete bases and carefully levelled at 3 degrees by means of adjusting screws) had been seriously disrupted by recent earth tremors. Despite crazy angles now emanating from the displaced light sources, it



was “standard” procedure to always have the VASIS switched on for landing aircraft! There were no NOTAMS warning of the unreliability of the ILS and VASIS. Later that day, a flight check by a calibration aircraft, confirmed that a false glidepath did exist at 5.5 degrees and steps were taken to adjust the beam down to 3 degrees. Two years previously, a China Airlines Boeing 707 had crashed just short of runway 24 at Manila after pressing on to land from a very high rate of descent in perfect flying weather. I wondered if he had tried to fly the same false glideslope that we had located, and simply blindly followed the ILS needles, instead of cross checking with other available instruments.

### **The radar is working, right?**

We landed at Hong Kong a few hours later and after two days of whatever one does in Hong Kong on layovers, we took off for Taipei and Guam at 1600 hours. Typhoon Juliet had by now passed over Saipan, causing damage to the airport instrument approach system. Scratch Saipan as the alternate airport for Guam! The typhoon was heading southwest at 15 knots and if it continued on its present track, would cross the airways route from Taipei to Guam, around 450 miles west of Guam. Our calculations indicated that on leaving Taipei we would be heading directly towards Juliet, with an ETA over the centre at midnight, however the 737 was equipped with modern weather radar and I had no qualms about picking our way between the inevitable storm clouds that surrounded the eye of the storm.

The thunderstorms associated with tropical typhoons could reach over 45,000 ft and with the extra fuel aboard needed for our planned alternate of Truk, our cruising level to Guam of 33,000 ft would not clear the tops around Juliet. Arrival and departure from Taipei proved uneventful and we settled down for the four hour night leg to Agana airfield, which serves both civil and U.S. military aircraft at Guam.





The huge Strategic Air Force base at Anderson Field was only a few miles up the road from Agana, but too close however for use as a weather alternate. The winds aloft were as forecast and I set the radar to scan at 180 miles. We knew that when the first storm clouds appeared on the edge of the screen, it should give us 20 minutes warning to evaluate our course of action. This could mean diverting up to 100 miles off track if the storm cloud area was massive. On the other hand, by careful interpretation of the radar returns, it may be possible to weave between individual thunderstorms. Much depended on the experience level of the pilot, particularly in radar knowledge. Slipping between storms can save fuel and time, but the passengers are up for a savage ride if the storms close in on the aircraft at the last minute. Radar is used to avoid storms, not to penetrate them.

Two hours out from Taipei and we were cruising in thick cloud. It was a black night and because of this we had no chance of seeing anything up ahead visually. There were no returns on the radar screen, except a few flecks which could have been sea returns. Guam weather was now clear, although ATC advised that lightning was visible on the western horizon. I adjusted the radar tilt control, moving the antenna down a few degrees towards the sea. Normally the sweeping radar beam would reflect back from big waves, but all seemed quiet down below. By now, the INS began to show a steady wind direction change indicating the upper air effect of the swirling gales on the surface. By now there should have been some storm cells beginning to show up on the screen, but the night was deceptively calm. I switched on the landing lights to see if the cloud was really thick, or merely high level cirrostratus. That was a bad decision on my part, as the F/O and I were momentarily blinded by the reflected glare from solid cloud whipping past a few feet away. Too late, we had lost night vision and it was now useless to peer through the windshield into the darkness looking for a close up thundertop anvil.



A stewardess gave us yet another coffee and I asked how all the passengers were. In the past, some had become rather drunk on long flights and had been a real nuisance. I was relieved when





the stewardess said that everyone was well behaved. I recall that during one flight from Hong Kong to Taipei, one particular seaman had constantly demanded more booze and seemed to enjoy stirring up the stewardesses as they walked past his seat. Finally, the senior stewardess complained to the captain about the man's behaviour. The captain warned the offender to lay off. Despite the warning, the man continued to worry the cabin crew, and again they complained to the captain. Handing over control to the first officer, and just before descending into Taipei, the captain returned to the back of the cabin and calmly told the Pacific islander that unless he apologized to the stewardesses, and acted in a more sober manner, the man would be in dead serious trouble. The passenger considered himself a bush lawyer, and arrogantly demanded the course of action the captain had in mind. The captain then told him that arrangements would be made for the Taiwanese police to meet the aircraft on arrival. After that, the police would take the passenger away and torture him a little. This threat had the desired effect, and the passenger became a model of good behaviour all the way to his destination in the Gilbert Islands.

Our own passengers had just settled down for the night when without warning, the aircraft hit severe turbulence. The F/O quickly turned on the ignition switches which would minimize the possibility of an engine flameout. There was a frightening blow to the left side of the aircraft from a sideways gust, followed by massive buffeting. It was obvious that we had flown into a storm top which had not shown up on the radar screen. I made an immediate announcement on the cabin PA system for passengers and cabin staff to sit down and put on their safety belts. Seconds later the cockpit was lit up by St. Elmo's fire with tiny dancing flames of static electricity covering the windscreen and streaming off the windscreen wiper blades. The turbulence became severe, with vicious gusts from all directions, and I concentrated on keeping the wings level on the instruments, whilst allowing the aircraft to ride out the turbulence with its own natural stability.





The radar screen continued to emit its normal soft green glow indicating a storm free sky. In fact it had probably failed an hour or so earlier while Typhoon Juliet was still beyond the long range scale.

### **At least lightning makes the tops easier to see**

Certainly I was no slouch at radar use, but I had never experienced a subtle equipment failure like this one. We were now up the proverbial creek without a paddle, namely a serviceable weather radar. The turbulence was still severe, as I carefully banked the aircraft starboard on to a compass heading of 180 degrees. The latest position of the typhoon centre had been relayed by satellite to Guam ATC, who had passed this vital information to us by HF radio. Fortunately, I had then drawn Juliet's position on my coffee stained plotting chart. The position of the eye was 50 miles to the port of our track, so a southerly course would be a safe bet. Put another way, we were already flying blind without radar with all the attendant worries about being clobbered by unseen storm cells, but at least we were heading away from the typhoon.

Vivid flashes of cloud to cloud lightning rent the heavens and I took the opportunity to look for ice on the wings as they lit up from reflected flashes. In fact, the presence of continuous lightning was a blessing in disguise. Each flash lit up the skies like daylight, enabling us to see the towering storm tops outlined for a frozen moment in time. Some were like battlements high above our cruising level, others were lower, but ominously building at 1000 feet per minute. Whilst the F/O steered the aircraft on automatic pilot, I kept my nose against the windscreen directing the F/O for last minute course changes. A flash would illuminate a dark monster 30 seconds ahead. Another flash would expose a clear patch 20 degrees to the right, and I would call steering instructions like a bomb aimer running into the target. I still couldn't believe the radar had really failed, and in between visual tracking between the now isolated storms, I tried to troubleshoot the problem. Even the F/O who was an electronics whip was unable to rectify the fault, so we reluctantly switched it off.

By now we had advised Guam ATC of our predicament, and we were cleared to divert from the air route by 100 miles. Eventually, the lightning faded behind us, leaving us without nature's illumination. A glimpse of stars above indicated that a climb to 35,000 ft might get us above the clouds. ATC gave the OK, and soon we were on top of high level cirrus. With Juliet safely behind us, we altered course towards Guam and called for more coffee. The Samoan stewardess arrived with the goodies, and said how much she enjoyed the turbulence and the lightning too, and could we arrange more of the same! The F/O and I looked at each other and told her she must be crazy. She then explained she was new to the job and was still very shy of talking to passengers. When the seat belt signs were switched on at the first turbulence encounter, it gave her the ideal excuse to disappear to the rear of the cabin and ignore the call button chimes of the frightened passengers. Good thinking 99, I thought. That girl has got initiative!

An hour later ATC radar picked us up 200 miles out to sea from Guam. We were very relieved to recognize the voice of the radar operator and we requested radar vectors around any heavy clouds. At one hundred miles out we broke clear of clouds into a typical Pacific moonlight night and sliding down the ILS we touched down safely on runway 06 Left. An hour later the first of many beers at the Guam Hilton hotel never tasted better.



## US Air Force announces it can save \$7 Million per year by adjusting one plane's windshield wipers.

The Air Force recently proved through a series of tests that its KC-135 Stratotanker aircraft can fly more efficiently just by mounting the cockpit window's wiper blades vertically instead of horizontally. The potential fuel cost savings: about \$7 million per year.

Researchers with the Advanced Power and Technology Office, part of the Air Force Research Laboratory, and the Southwest Research Institute, assessed the KC-135 after similar tests were conducted on a commercial McDonnell Douglas MD-11 cargo airliner. The commercial tests showed the new blade direction reduced its flight drag by 1.2%.

"Across the KC-135 fleet, blades are positioned horizontally on the windshield as part of the aircraft's original 1950s design," officials said in a news release. "However, as the understanding of aviation aerodynamics advanced, research indicated placing the wipers vertically when not in use could improve aerodynamic efficiency and optimize fuel use."

The months long ground tests at Rickenbacker Air National Guard Base in Ohio, home of the 121st Air Refuelling Wing, indicated aircraft drag can be reduced by approximately 1% during cruise conditions, the service said. Using "computational fluid dynamics," or CFD, the aeronautical engineers "were able to model how air flows over the nose and windshield of the aircraft during flight, simulating both vertical and horizontal wiper positions," the release said. The data collected revealed drag was reduced 0.8% just by moving the blade vertically, and 0.2% for a slimmer wiper design on the cockpit's window.

"While 1% efficiency may not seem like a lot, it equates to millions of dollars in fuel savings each year, which can then be re-invested into other programs," Daniel Pike, acquisition manager and chief of future operations for Air Force Operational Energy, said in a statement. For example, the KC-135 fleet used more than 260 million gallons in fiscal 2019, that accounts for roughly 14% of the Air Force's total fuel use across its aircraft fleets. "When you combine the results of optimization efforts across multiple aircraft, you start to understand how much of an impact this could have," Pike added.

The Air Force will next move on to airworthiness testing in order to receive the proper certifications from the Federal Aviation Administration. Engineers will also improve the wiper design before heading into the next test phase sometime this summer. The service plans to share its findings with Delta Airlines to help assess whether a similar layout could be used on its Boeing 767 fleet, the release said. Units across the service have been



searching for new ways to drive down spending in various ways. For example, in June 2018, airmen with the Air Force Research Laboratory's Junior Force Warfighter Operations team said they were [reengineering a milk stool](#) used by C-130 Hercules fleets worldwide. The effort -- to make a more easily transportable stool that props up the plane's rear loading ramp -- would create an annual savings of "approximately \$375,000 for the Air Force and up to \$1.7 million if the new milk stool is adopted across the entire C-130 fleet," officials said at the time.





## Sick Parade

### Don Mazlin.

Noel Hadfield advises that Don Mazlin, Instrument EngO, spent a few weeks in hospital recently, thankfully he's now back home. Don has to be close to 90 – get well mate.

### John Griffiths.

John went into Greenslopes hospital on Thursday 28<sup>th</sup> May to have a thyroid problem repaired. Thankfully they fixed him up, he spent one night relaxing in a comfy bed, being watched over by and looking at all the lovely nurses then they let him go home next day. He's now fit and well.



### Bob McDougall.

Gary Butler advises that Bob McDougall has been admitted to Parkview Aged Care facility in Perth, due to his worsening dementia, for full time care.

### Bill de Boer.

In the 1st June, Bill went into the Hillcrest Private Hospital in Rockhampton to have a new knee installed. His old one had gone well past its TBO and had to be replaced, not something to be sneezed at but necessary none the less. For nearly a week Bill kept the lovely nurses on their toes, he was regularly brushing his teeth, combing his hair, bunging on the after-shave, giving the nurses chocolates, chatting them up, whispering sweet nothings and try as he might, they would always escape as he's no longer swift on his feet.





Bill was sent home on the 5th June with a new set of crutches and now sits on the balcony, soaking up the sun and milking it for all it's worth.

Get well Bill - you've got an important job next April.



## Stuff

### Caribou A4-173 Accident at HAI YEN Friday 7 May 1965.

“Jake” Jacobsen

At 1305 on Friday 7 May 1965, RAAF Caribou A4-173, of RAAF Transport Flight Vietnam (RTFV), crashed at Hai Yen in Vietnam. Hai Yen was a small fortified settlement located on the south-western tip of the Mekong Delta, south of Ca Mau.



Route flown and location of Hai Yen.



After landing at Hai Yen.

The pilots of the aircraft were Flight Lieutenant Dave Cooper and Flying Officer Brian Hammond. Down the back was the loadmaster Corporal Barry Ingate and assistant loadmaster Leading Aircraftsman Eric Massie. It had been a busy morning for the crew. Barry Ingate takes up the story:

*“On 7th May 1965 I was assigned to A4-173 to do one of the two so-called milk runs. This one we did on Monday, Wednesday and Friday and involved hauling pax and freight (a lot of mail) around the delta, leaving Saigon and hopping from place to place (always the same places) and eventually arriving back at Saigon and then back to Vung Tau. We were on the return part of the mission and landed at a place called Ca*



*Mau where we were told we had an additional run to do to a place called Hai Yen, not on our normal route and about as far south as you can go in the delta. The VC had hit the place the night before and killed quite a few people (Vietnamese) and they needed coffins.*

*So we loaded up with what I called D.I.Y. coffins (as they were mostly in pieces to be assembled later) and a few passengers and headed south. Hai Yen had a short P.S.P. (Pierced Steel Planking) strip (about 900 feet I think) set in a vast area of rice paddy fields and mud. It was like landing on a small aircraft carrier and, like an aircraft carrier, if you landed short you were in trouble. Unfortunately, at 1305 that's what happened and we tore the starboard main gear loose, came down on the starboard wing and bent it and the starboard prop. We eventually came to a grinding halt not quite fully off the strip and in the reeds and mud. No-one was hurt although the pilot was understandably pretty upset. Anyway, I got the aircraft unloaded and secured as best I could while the pilots called base (there was a small U.S. Army post at Hai Yen) and arranged for U.S. Army choppers to lift us out.”*

Extracted from Unit History Sheets, they departed Vung Tau at 0720 and, after loading up with freight and passengers at Tan Son Nhut (Saigon) they landed at Moc Hoa, Cao Lanh, Kien Giang on their way to Ca Mau. Coincidentally, this was to be the last day of operational flying in Vietnam for Brian Hammond as he departed for Australia on 12 May on completion of his nine month tour.



View after aircraft skidded to stop.



Looking rear after 173 came to Rest - US Air drop ammo box debris still on runway.

An initial assessment of the aircraft indicated that it would have to be written off and reduced to spare parts as a replacement right wing was not available. Work commenced to break the aircraft down to spares. In the main, the removed equipment included radios, instruments and electrical items. Most wiring looms were cut rather than disconnected as there was a perceived need to “get in and get out”.

Fortunately, the initial decision for write-off was reversed before larger components had been removed. Recovery of the aircraft became a viable option when the US Army generously offered the loan of a spare wing and transport support thus, enabling the aircraft to be repaired in the field and flown back to home base at Vung Tau. Unfortunately, there was to be more damage inflicted on 173 prior to the recovery team arriving. Charlie Downes was one of the Hai Yen recovery team as an Airframe Fitter. He recalls the event:





*“Before our arrival the yanks did a supply drop of ammunition in boxes, and the only drop zone available was the runway. One box landed on the previously undamaged left wing leading edge, near the spar. The damage was not terminal and a temporary fix was done for the return flight to Vung Tau”*

It has been suggested that this incident was an embarrassment to the Americans which led them to being so generous with spares and transport assistance. On Tuesday 11 May, a composite crew of RAAF and US Army technical personnel with spares and necessary general support equipment (GSE) was flown to Hai Yen by the 330th Aviation Company. Ron Furze was one of the recovery team that day:

*“The recovery team was flown on a US Army Sikorsky H-37 Mojave helicopter from Vung Tau to an intermediate stop (probably Can Tho) to refuel, and the 13-man team were then transported by U.S. Army Iroquois from Can Tho to Hai Yen. The replacement engine, propeller and right wing were later transported to Hai Yen as internal loads on an H-37.....”*



In front of H-37 Mojave “Big Ed”  
(The aircraft look like a Bristol Freighter with rotors)  
Standing: US Army H-37 Pilot  
Kneeling L-R: John Rae, Unknown, Kevin Martin

The RAAF recovery team was led by Warrant Officer Engineer (WOE) George McLean. Others in his team were:

- |                              |                   |
|------------------------------|-------------------|
| Flt Sgt Frank (Jerry) Latham | Engine Fitter     |
| Cpl Fred Fortescue           | Engine Fitter     |
| Cpl Charlie Downes           | Airframe Fitter   |
| Cpl Ron Furze                | Electrical Fitter |
| Cpl Ian Johnston             | Radio Technician  |
| LAC Robin Wright             | Engine Fitter     |
| LAC Kevin Martin             | Airframe Fitter   |
| LAC John Rae                 | Instrument Fitter |
| LAC Peter Jones              | Metal Basher      |



There were also some US Army technicians, who mainly worked on the airframe, but helped other trades when needed. Their assistance was certainly appreciated.



Right wing removed.



All hands needed to get it out of bog onto PSP.



Loaned US Army wing being fitted.



George McLean with hammer and US Marine techs.

Initially, the right wing was removed, the aircraft jacked and a replacement right undercarriage fitted. Using manpower and an Army truck, the aircraft was towed out of the drain to a PSP hardstand. The right engine was removed and replaced and a second hand US Army Caribou wing, complete with US markings, was fitted. The electricians also had a big task rewiring cockpit instruments and looms which had been cut after the earlier decision to write the aircraft off. The US Army wing fitted perfectly, however not all the ancillary fittings matched up. The aileron runs could not be lined up, so the trim was locked in the “best guess” position for the recovery flight.

The technicians were unable to get the flaps operational, so they were locked in the take-off position and remained there for the flight back to Vung Tau. The right main and nose wheel undercarriages were replaced and all were locked down for the recovery flight. The recovery team was required to work in the open without workshop facilities. Interestingly, nearly all the airframe and engine work was carried out without the reference to publications or the signing of work sheets. It was a matter of getting the work done as quickly as possible and get out of there. They did exceedingly well to get the aircraft flyable in four days, particularly when they were only allowed outside the camp compound to work on the aircraft between 0800 and 1600 each day.



There was a small US Army Special Forces camp based at Hai Yen comprising around ten troops. Their role there was to direct, organise, train and supply the local ARVN troops against the VC. The recovery team were guests of the camp during their five nights there and were provided with basic accommodation and the good old Army rations. Each morning, when the team returned to the aircraft, they found one or two bullet holes. Fortunately, the VC were terrible shots and the damage was easily repaired with a “penny” patch.



John Rae replacing removed instrumentation.



Bob Wright refuelling the hard way.

By Saturday afternoon, 15 May 1965, the recovery team deemed the aircraft sufficiently airworthy to be flown back to Vung Tau, its home base. Next morning, Flt Lt Rocky Rockliff, the senior RTFV engineering officer, arrived by helicopter with the aircrew to inspect the repairs and give technical approval for the recovery flight. Charlie Downes recalled the first words Rocky said to him after arrival, “Will it fly Charlie?”. Charlie and Jerry Latham walked Rocky around the aircraft pointing out the airframe and engine repairs that had been done. Rocky had a personal interest in the air worthiness of the aircraft as he was to be on board for the recovery flight.

Mid-morning, sporting a mixture US Army and RAAF markings A4-173 lifted off at Hai Yen for the recovery flight back to Vung Tau. It was flown by Sqn Ldr Doug Harvey, the Commanding Officer of RTFV. Barry Ingate, the loadmaster on the flight of the accident, was again the loadmaster on this flight. The SENG, Rocky Rockliff, and WOE George McLean were also on board. Mysteriously, the Unit History Sheets do not indicate who was flying in the co-pilots seat. With the flaps locked in a partially down position and the undercarriage also locked fully down, it was a slow flight home. The pilot had to maintain considerable left aileron to keep the aircraft straight and level. They had to make a stop at Ca Mau enroute for a refuel.







A4-173 preparing to take-off from Hai Yen after in field repairs.

Sqn Ldr Doug Harvey back at Vung Tau. Note US starboard wing markings.

Sqn Ldr Harvey later noted "Without the generous support and co-operation given by the United States Army, the aircraft would have simply been written off." The SENGO, Reg "Rocky" Rockliff, commented that he tried to recommend several of the recovery maintenance crew for awards of the British Empire Medal, which was the only suitable award available at that time, however, only a Mention in Despatches were awarded to Frank Latham and Charlie Downes.

A4-173 underwent major repairs and overhaul at Vung Tau, including replacing the loaned US Army wing. Four months later, on 9 September, the aircraft was returned to operational flying. Unfortunately, the aircraft was to be involved in a very similar accident thirteen months later at Ba To.

The month of May had not been a good month for the RTFV. In addition to the Hai Yen accident on 7 May, another unit Caribou, A4-171, suffered serious nose wheel undercarriage damage at Tanh Linh on the 13th. It required significant repairs in the field and was also flown back to Vung Tau by Sqn Ldr Harvey with the undercarriage locked down.

### Aphorisms.

Seat belts are not as confining as wheelchairs.

## Ballarat.

Ray Miles (below) saw Brendan Godwin's "[History of Radschool](#)" in our previous edition, he says:



"Hi Guys, you are doing a great job with the Association. You may have received a bit of feedback re the Radschool history article (which I very much appreciated), however I thought I should share a little of my training experience on staff from 1988 to 2001. (Including a correction that C-E trade training was at Wagga from 1995 to mid-2000.) You may see fit to publish some of this info (edited as you see fit). I've also included details of Radschool history from the Closure Port in case you are not familiar with it – [see later](#).

Thanks again for your excellent work. Regards, Ray

## CETECH Training

Firstly I would like to say what a great job you guys are doing with the Radschool Association and the Mag. I was reading Vol 69 and on page 8 there is an article on training in which I noticed some errors and omissions (as was acknowledged there might be).



First a bit of background, I undertook TELSTECH training at Laverton on 7TMT course from August 1970 to December 1971. (Just as an aside, I do not recall(!) any Navy trainees there then.) Also, I do not wish to comment on training prior to my time, however I would be interested to know where the TELSTECH mustering fitted into this in the early days. I had been given to understand that none ever went through the apprentice scheme. The reason I was given was the need for a higher security clearance that wasn't possible for people of those young ages.

What I do want to advise about is my first-hand experience that comes from my time on staff, first at Radschool, then at RAAFSU Wagga and RAAFSTT and finally at HMAS Cerberus, which was continuous for 14 years in different capacities from January 1988 until December 2001.



I was posted to Radschool in January 1988 as a SGT instructor and for the first 2 years taught basic semiconductor theory and simple amplifiers. The next year I was moved and taught TELSTECH postgrad equipment subjects before promotion to FSGT and moving to Exam Section for the next 3 years until the close of Radschool at the end of 1993. (A total of 6 years at Radschool.)

As another digression, many may not be aware that, as the last courses progressed through Radschool, the 'redundant' instructors were utilised in writing new courseware for training the new CETECH courses at Wagga, however, they were expressly forbidden from using any instructional material from Radschool. Copies of the Radschool courseware were held at Wagga and people were employed to check that none of it was included in the new material. This was very disconcerting to those of us who had witnessed the refinement of the Radschool material over many years, and that all this proven work was now being deliberately trashed as a policy. It was very hard to take.

After Radschool I was posted to RAAF Support Unit Wagga in January 1994 to oversee implementation of this new courseware in CETECH training, as well as running the exams for RAAFSTT. We found that much of the material had been edited at Wagga and many errors introduced! It took a lot of sorting out, including a lot of arguments with local courseware developers, none of whom were former Radschool instructors! In January 1995 I was promoted to WOFF and took over responsibility for CETECH training delivery until the end of 1999. (A total of 6 years at Wagga.) In January 2000, I was posted to HMAS Cerberus to oversee the transfer



and implementation of CETECH training there until my posting out (after 2 years) at the end of 2001.

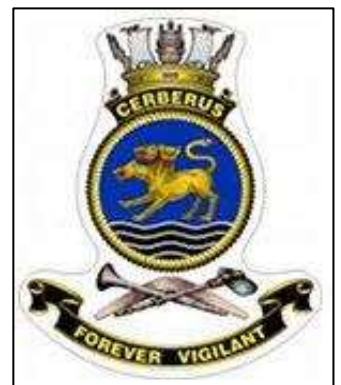
One person who put in a huge effort at Wagga with the courseware recognition process, which subsequently led to the move to Cerberus, was Terry Withers. It was he who took over my first job at Wagga when I was promoted to WOFF, and then the running of the last training at Wagga when I moved to Cerberus. He put in a massive amount of excellent work in the background that made it all possible. Later on he took a commission from WOFF and last I heard, many years ago, he was a SQNLDR.

So in summary, the sequence was the TELSTECH mustering was disbanded and merged into the Radio Technician Ground mustering on 30 November 1989. At the end of 1993 the Radio Technician Ground mustering, together with the Telecommunications Riggers (Linies), were formed into the Communications Electronics Technician mustering by the Technical Trades Restructure. Contrary to the article in the previous edition, CETECH training was in fact transferred from Radschool to RAAFSTT Wagga in December 1993 until late in 2000. During this period Tels Rigger conversion courses and other postgrad courses were also conducted at Wagga.

This was achieved with an instructor staff of 10 SGTs and CPLs under the WOFF and the FLTLT OIC (who was also responsible for CISCON training). The first course ran from May 1994 to Jun 1995.

The Technical Trades Restructure also required that training be in three stages, Mechanic, Fitter and Technician. Fortunately, it was identified early that there was little to no use in the C-E field these days for a Mechanic level of skill, so trainees were to graduate as Fitters. There was no further theory training, but to progress to Technician required completion of a Competency Journal on the job over a minimum of two years.

C-E trade training would most likely have remained at Wagga except that all trade training courses were required to have national civil accreditation, and this was a very laborious and expensive process to go through. It was patently obvious that, after going through all this for the aircraft trades, the RAAF had no interest in pursuing this for the C-E mustering (or CISCONs and who knows who else) as well, so we were instructed to find training delivered elsewhere that was already accredited. The Army and Navy were both investigated, with the only reasonably compatible option being the Navy. (This is really an extremely simplified version of all the machinations that transpired, including the independent evaluation of our training requirements as being Certificate 4 level, whereas our pay structure (as well as air trades) was tied to Certificate 3! Army were in fact based on Certificate 4 and so were incompatible.)



From January 2000 training continued at Wagga to complete the courses already commenced there (plus some postgrad courses), while the new training was being organised to integrate with Navy courseware of the Engineering Faculty (EF) at HMAS Cerberus. The total staff transferred to Cerberus in January 2000 for this comprised one WOFF (also the 'EF Senior RAAF Member') and three SGTs





to look after all CETECH specific courseware and delivery! As I recall, the only postgrad training at Cerberus was Datacomms, although Greybrick radio was considered initially.

It was a very busy time for all of us. For myself, I was the sole interface at Cerberus between 1RTU, HQ Training Command, Mustering Sponsor, Navy (including their civilian training contractor) and my own staff (and that does not even imply the half of it!). Fortunately, my staff were excellent and independently ran with a lot of the preparation work with courseware and general trainee support needs.

By the way, your [photo of Cerberus](#) is great. It is a very large facility, but the portion displayed is primarily focused on the many buildings that make up the Engineering Faculty.

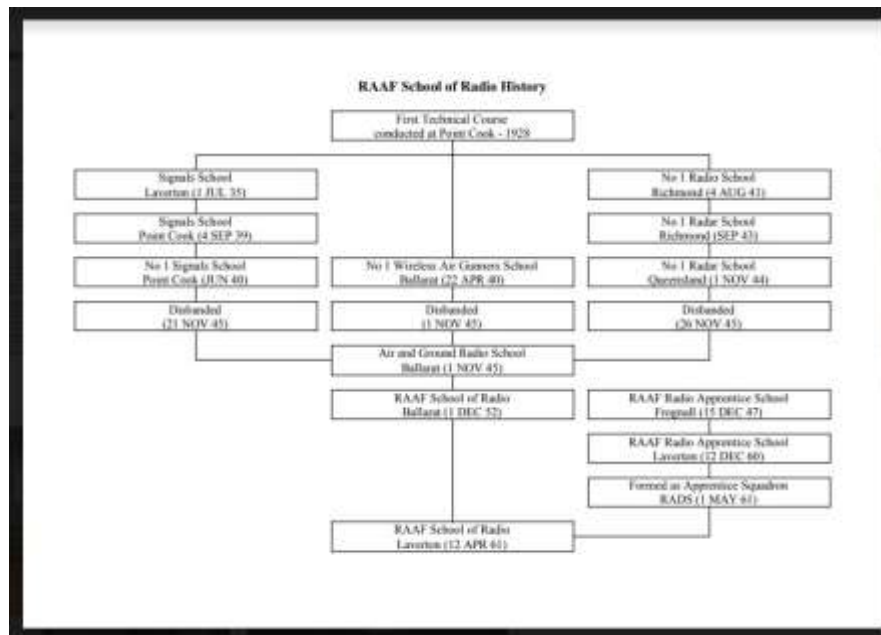
The first Cerberus basic trade course commenced in July 2000 and graduated the first trainees in September 2001. (That was September the 5th not the fateful 11th!) Ambitiously, the first course was originally planned to commence in April of 2000.

I posted out of Cerberus WEF January 2002.

Lastly, for your interest I have included a couple of files which are a history of Radschool taken from the commemorative port produced for the occasion of its closure. The text is copied from the back of the three small bottles and the diagram is from the inside of the wooden box lid. I do not know who at Radschool was responsible for putting this record together. Yes the bottles are still sealed! As you can see, the bottles are still unopened, I was advised that the port was not intended to be consumed and wouldn't be too palatable. They were for sale prior to the closure, I think for \$50, which was reasonable, but I couldn't justify it at the time, however, one set was the main prize of a lucky seat draw at the closure dinner ... and now has a home with me.

Click each of the pics below for a bigger view.





Story on the back of each bottle!

### INITIAL RADIO TECHNICAL TRAINING

In 1928 eighteen wireless trainees graduated at Pt Cook from the first technical course conducted by the RAAF. From this inauspicious beginning the RAAF Signals School was formed at Laverton on 1 July 35. Apart from re-locating to Pt Cook on the 4th September 1939 and its subsequent re-naming to No 1 Signals School in June 40, its role remained unchanged. The clenched fist holding the three lightning bolts is one of a number of insignia worn by graduates of this school. War time also saw Wireless Air Gunners training introduced to meet commitments under the Empire Training Scheme. Three schools were established with the first of these schools, No 1 Wireless Air Gunners School, being formed at Ballarat on 22nd April 40. Graduates wore AG Brevet. The war also saw introduced radar training which was undertaken at No 1 Radio School, formed at Richmond on 4th August 1941. The school was re-named as No 1 Radar School in September 43 and was transferred to Maryborough on 1st November 44. Because of secrecy, no official insignia was issued. Therefore, the LW/AW Radar Antennae represents this school.

### RADIO APPRENTICE TRAINING

On 15th December 47, the Radio Apprentice School was formed at Frognall to produce Radio Technicians of the highest calibre. The School also aimed to provide apprentices with the best possible general citizenship training to assist them in taking their place in society.

The first Radio Apprentice course commenced academic training at Melbourne Technical College on 9th February 1948. During January 1949, Radio Apprentice Technician courses were divided into Diploma and Technician courses.



Members on the Technician course followed a curriculum similar to the Melbourne Technical College technician courses, while Diploma course apprentices studied for the Diploma of Radio Engineering. Fellowship Diploma courses were introduced in 1953 for advanced academic students who were granted Cadet Officer status at the start of their second year of training. Fellowship Diploma courses closed in January 1961. On 12th December 1960, the Radio Apprentice School was re-located to Laverton with Diploma courses remaining at Frognall as a detachment of the school. On 1st May 1961, Radio Apprentice School was absorbed into the structure of the RAAF School of Radio as Apprentice Squadron. The Frognall detachment subsequently became part of the new unit, the Diploma Cadet Squadron in October 1962. Apprentice squadron continued to train apprentices until its closure in December 1992.



## RAAF SCHOOL OF RADIO

At the end of World War II, No 1 Signals School, No 1 Wireless Air Gunners School, and Radar School were disbanded re-forming as the Air and Ground Radio School on 1st November 1945, at Ballarat. On 1st December 1952, the school changed its title to the RAAF School of Radio, however there was no change to its training role. The next significant events were the Schools move from Ballarat to Laverton on 12 April 1961 and when the School became fully operational at Laverton on 1st May 1961, the absorption into its structure of Radio Apprentice School as Apprentice Squadron. The School's training role suffered minimal disruption from its formation as Air and Ground Radio School until Signaller (later Air Electronics Officer) training was transferred to the School of Air Navigation in May 1968. A new school building was opened on 3 December 1974 and a Governor General's Banner was presented to the School on 29 April 1983. Training of Radio Officer, Apprentices, Radio Technicians, Communications Operators and Electronic Data Processing Operators continued at the school until changes to the RAAF training philosophy resulted in the Schools demise with the doors closing for the last time in December 1993.

On a personal note, I spent two more years in training in 2005 and 2006. My posting from Cerberus was to No 3 Control & Reporting Unit (3CRU) at Williamstown from 2002-2004. Subsequently, I was posted to Surveillance & Control Training Unit (SACTU), then I did a short stint at HQ44 Wing prior to discharge in August 2007 (after 37.5 years).

A good time to keep your mouth shut is when you're in deep water.

**Ken Hunt** also saw the story in Vol69, he says:





"I may be able to fill in some of the gaps in Brendan Godwin's wonderful RAAF School of Radio History.

I was there as a Nasho in 1955. We served for 154 days, about five months. Our course had twelve starters. Starting in January we did about a week at Pt Cook, marching and some kitting, then off to Ballarat, by train and bus, under the control of the second highest rank (???) a corporal PE instructor. We eventually passed out at Pt Cook as a Radio Mechanic. Incidentally, what we did at Radschool was nothing like the normal course for adult permanents.

We never even saw any RAAF radio equipment. We did none of the filing etc normally done at Wagga Wagga. Started with static electricity through to a week of radar and an hour or so in the van. We did little practical although we did build a two valve amplifier and experimented with UHF aerials. We also spent a Saturday with back-up power, 10hp Ford, a V8 and a big diesel, somewhere in the bush.

I think that our Radio Mechs course was a copy of the trades' course at a Melbourne Tech College. The senior instructor at Radschool, SqnLdr Webster, came from civvie life and was at Pt Cook to sort out possible radio mechs, from airfield defence recruits, who were to go to Laverton. My discharge documents stated "may make a fair Radio Mechanic".

In Ballarat at that time there were several courses running for airmen. Also, about a dozen or so apprentices were there, they were about our age so I would guess they were near their final year. A mate of mine also his Nashos in 1954, the year that our Queen came to Ballarat. He said it was the same as I experienced in 1955.

About two weeks before we were to pass out, someone discovered that we had only shot on the 25 yard range, so instant panic and off to the long range we went. Because we were a small flight and really didn't fit, we got away with murder. It was meant to be a closed base but 11 of us went to town to the pictures and three officers and wives came and sat in front of us. All that was said was "good evening airmen" "good evening Sir". Of course we were AWOL???

While there I was surprised to see so many planes parked in the war days. In 1955 there was a Mosquito hidden in one of the hangers. During my 154 days a DC3 came from East Sale twice and stayed about a week. Oddly, the skipper was a sergeant pilot and the copilot was a Group Captain keeping his hours up. It was used to give the GCA operators experience in 'talking it down', otherwise it was used to count the cars on the goods trains on the western line, about 3 miles away.



Another thought, most Nashos were only in the RAAF during summer, so we were not issued 'blues'. As we were there close to Easter, the 12 of us were sent to L group for our blues. Ballarat was not used to 12 complete sets being issued. They advised us to 'beg borrow or steal' what we could. Then there was the SOA's parade....About six of us were fully dressed, one guy had no shirt so wore his drab shirt under a blue battle jacket, others were missing collars, studs and



braces. Once the SAO found a guy with no braces, he then went through the flight lifting up the back of 12 jackets, checking for missing braces.

I hope that this may fill gaps but if you think of a question, you have my email.”

Business conventions are important because they demonstrate how many people a company can operate without.

## Aviation sadness.

Ernie Gimm sent us this info:

It looks like everything's back to normal for China's aviation business. Surprise, surprise!

But it's a very sad time for the 100 year old aviation industry.

- Virgin fires more than 3,000 people including 600 Pilots.
- Virgin Australia enters administration.
- Thai Airways files for bankruptcy.
- Air Mauritius goes into Administration.
- South African Airways Bankrupt.
- Finnair returns 12 planes and lays off 2,400 people.
- YOU grounds 22 planes and fires 4,100 people.
- Ryanair grounds 113 planes and gets rid of 900 pilots for the moment, 450 more in the coming months.
- Norwegian completely stops its long-haul activity!!! The 787s are returned to the lessors.
- SAS returns 14 planes and fires 520 pilots... The Scandinavian states are studying a plan to liquidate Norwegian and SAS to rebuild a new company from their ashes.
- Etihad cancels 18 orders for A350, grounds 10 A380 and 10 Boeing 787. Lays off 720 staff.
- Emirates grounds 38 A380s and cancels all orders for the Boeing 777x (150 aircraft, the largest order for this type). They "invite" all employees over 56 to retire





- Wizzair returns 32 A320s and lays off 1,200 people, including 200 pilots, another wave of 430 layoffs planned in the coming months. Remaining employees will see their wages reduced by 30%.
- IAG (British Airways' parent company) abandons the takeover of Air Europa (and will pay €40 million compensation for that).
- IAG (Iberia) grounds 56 planes.
- IAG (British Airways) grounds 34 planes. Everyone over 58 to retire.
- Luxair reduces its fleet by 50% (and associated redundancies)
- CSA abolishes its long-haul sector and keeps only 5 medium-haul aircraft.
- Eurowings goes into Bankruptcy
- Brussels Airline reduces its fleet by 50% (and associated redundancies).
- Lufthansa plans to ground 72 aircraft (in 2 instalments).
- Hop is studying the possibility of reducing fleet and staff by 50%.

Additional info:

- Currently, 60 new aircraft stored at Airbus with no buyers in sight (order cancellations) including 18 A350s.
- They forecast a minimum of 8,000 grounded planes by September. With an average of 5.8 crews per plane (medium and long haul combined), that would make more than 90,000 unemployed pilots worldwide.

The Air Transport Industry is on Life Support ! This will have a major impact on our lifestyle ...the worst is yet to be witnessed

**PRETTY WILD  
HOW WE USED TO  
EAT CAKE AFTER  
SOMEONE HAD  
BLOWN ON IT...  
GOOD TIMES...**





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## DVA Issues

### Mental Health Care for Veterans.

If you, or a Vet you know, are having a few problems, DVA will provide you with mental health care, free of cost and with no questions asked. You do not need to prove your problems were caused by your service. There is one, and only one, condition in order for you to receive this care and that is you must have completed at least one day of continuous full-time service (CFTS) in the Permanent ADF.

Reservists can also be eligible for this relief if, as a Reserve in the ADF, they provided:

- Disaster Relief Service, or
- Border Protection Service; or
- Were involvement in a serious service-related training accident.

If you are eligible, you will receive a Veteran White Card which allows you to access free treatment for any mental health conditions. This Card will cover all required mental health treatment which can be provided by a:

- general practitioner (GP)
- medical specialist
- psychologist
- psychiatrist
- occupational therapist (OT)
- social worker
- hospital; or
- specialist PTSD program



If you automatically received a Veteran White Card after transitioning from the ADF, you can access mental health treatment straight away. You do not need to apply. If you did not receive the Card and you are having problems (and you qualify), you must first apply to DVA for the White Card, you can do this by:

- applying online via [MyService](#), or
- calling DVA on [1800 555 254](#), or



- email DVA at [NLHC@dva.gov.au](mailto:NLHC@dva.gov.au); or
- complete an [application form](#)

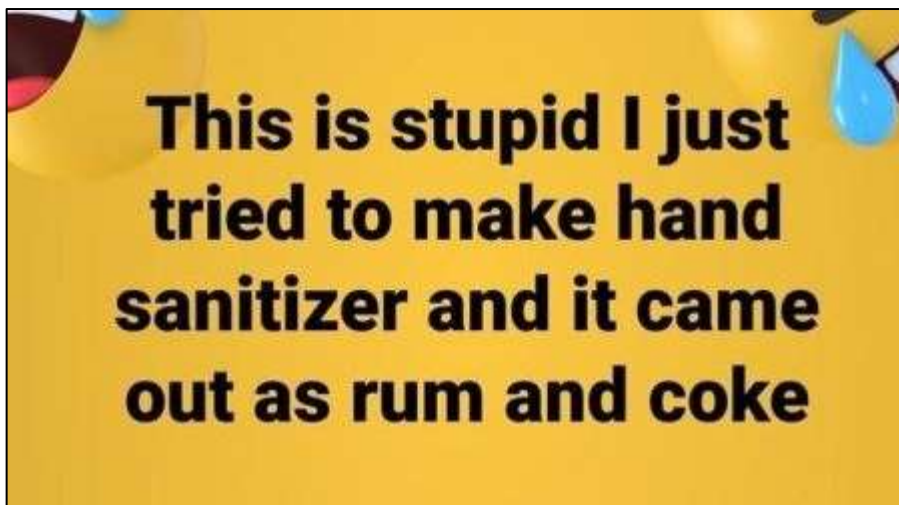
[Proof of Identity](#) (POI) documentation may be required.

You do not need to wait until your card arrives to start treatment. You can show your healthcare provider a digital version of your card on your mobile phone through MyService. If you are charged for treatment while waiting for your card, keep your receipts and [claim it back](#).

Your Veteran White Card, which covers treatment in Australia, but not overseas, also gives you access to cheaper prescriptions for the conditions that your card covers. You may be eligible for a [Veterans Supplement](#) to help towards the cost of medicines.

To obtain help, once you have the Card, make an appointment with your general practitioner (GP) who will most likely talk with you about your symptoms and your wellbeing and help you work out your next steps. They may refer you to a specialist. If you need help finding a GP, you can use the [Health Direct](#) website to find one.

If anything changes that could affect your entitlements, you need to let DVA know within 14 days (or 28 days if you receive the Remote Area Allowance or live overseas).



## DVA Nominal Roll

DVA has consolidated the Nominal Roll websites into a new, single access portal at <http://nominal-rolls.dva.gov.au/>.

The new nominal rolls website was implemented on 5 March 2020. It continues to provide information on the service history of members of the Australian Defence Force (ADF) who served during World War II, the Korean War and Vietnam War, consolidated in a single location. The new website has an improved look and feel and a much improved search functionality.





To help make the transition to the new website seamless and easy for veterans and their families to use, users accessing previous websites are being automatically redirected to the new site.

## ANZAC Day, 2020.

ANZAC Day 2020 is one that people will remember for all time, that year it was forbidden to meet with long-time mates who, in times gone by and in distant lands, one had lived with, borrowed from and served with for the good of the country. Meetings were banned, everything was closed, people were terrified that an invisible enemy would sneak up and kill them, the world just stopped. It was terrible. For nearly a hundred years, Australian serving and ex-serving men and women had got together on the 25<sup>th</sup> April to rekindle old friendships, to remember their good and bad experiences in times of conflict and to pay homage to old mates who had given all – but not in 2020.



That year COVIC-19 put a stop to everything, everything that is except the spirit and dedication of the ADF family. If they couldn't get together to remember, they could most definitely do it individually. On the morning of the 25<sup>th</sup>, instead of getting up early and congregating at a memorial of their choice, they would have their own quiet moments in remembrance. Most were not going to let that day pass without some form of dedication. Right throughout the country, old diggers and old diggerettes rose, dressed with their medals displayed, some held their own silent vigil at dedicated memorials, others stood at the end of their driveways, hand on heart and watched the sun rise.

Some of those people were:

Ron Faulkner.

Ron was in Roma (Qld) and stands near one of the Historic bottle trees which frame Wyndham St. The Heroes Avenue of 93 Queensland bottle trees (*Brachychiton rupestre*) creates a uniquely outback boulevard, remembering the men of Roma who died in WWI. The first tree was planted in 1918 supposedly in honour of Lieutenant Corporal Norman Saunders who was killed in France in 1916. That tree, outside the Post Office, near the corner of McDowell and Wyndham streets, is locally known as the Tree of Knowledge. The rest





of the avenue, extending from the railway station into Wyndham Street and along Bungil Street to the intersection with Hawthorne Street, was planted by 1920.

Originally each tree bore a brass name plate. Only one survives and it has become part of a cairn outside the Post Office, displaying all 93 names. A WWI Honour Board is located in the Roma-Bungil Cultural Centre in Bungil Street. In 1938, Colonel Sir Donald Cameron unveiled a cenotaph in the town's Queen's Park the end of the avenue of bottle trees. It too honours the WWI fatalities. It has since added the names of 39 men who died in WWII. Behind it stand nine pine trees, said to have been grown from seeds collected at Lone Pine, Gallipoli.



### 35 Sqn





John "Sambo" Sambrooks, the 35 Sqn Association Secretary/Treasurer held a memorial at his home in Brisbane, after which those present were treated to a typical Ozzie breakfast, an egg, two snags, a durrie and a couple of stubbies.

Click the pic to see video of the service.

Nev Duus, of 2 Squadron, at the Tewantin (Qld) War Memorial.

Click the pic to see video of the event.







Mick Lawson.



John Lunn had a quiet one or six in memory of.....something??



Tony Thompson – at Wagga



Wagga – at an early hour.





With the Kingsford Smith Drive (Brisbane) road-works nearing completion, the memorial which sat not far from the Breakfast Creek Hotel was moved to a more fitting position and was well attended at the early hours of the 25<sup>th</sup>.

This memorial was erected originally to remember the men of Hamilton who gave all during the First World War. Over the years, it has been amended to include all who have fought in all conflicts since.

The memorial was unveiled back on the 16<sup>th</sup> August 1931 by the governor, Sir John Goodwin and until this year has been the site for regular ANZAC Day ceremonies.

Back when Brisbane was governed by many councils, before the amalgamation into the Brisbane City Council in 1924, the then Hamilton Town Council proposed erecting a memorial at Cameron Rocks as a memorial to the soldiers who left the town to fight in the Great War. The project was started during the war but the Council was prevented by Commonwealth edict from raising money. It remained in abeyance until after the war in 1922, when the Mayor Alderman CM Jenkinson received further donations. In 1924, there was enough money to start but not complete the memorial. It was planned to erect a pagoda in the form of a Victoria Cross surmounted by a tower with a four face clock with a water fountain installed in the centre of the pagoda but funds did not allow it to be.



Although numbers were well down on previous years, in 2020 they still came.





Arthur Rennick – being thanked for his service by a couple of the neighbourhood kids..





Wal Walters – in Kiama (NSW)

Others let everyone know their feelings by displaying relevant material.



Geoff Hall





Bill de Boer





## ANZAC Biscuits.

The ANZAC biscuit is an Australian favourite and perfect for a healthy dessert or afternoon treat with a cup of tea.



Try this great basic biscuit recipe or a unique dried fruit variation below. As the story has it, the original ANZAC biscuits were baked by the doting mothers and wives of Australian and New Zealand Army Corps soldiers and sent across the oceans as a token of their love. It's an eggless, sweet biscuit with a long shelf life, which made it ideal for the brave men to keep by their side on the battlefield. These crunchy biscuits have since become an Australian favourite and are traditionally eaten on ANZAC Day... but adored all year round! There are hundreds of different variations of the ANZAC biscuit recipe, some with interesting additions like fruit and some even coated in icing. Traditionally comprised of oats, sugar and butter, the batter relies on golden syrup to bind the ingredients together.



### Ingredients:

- |                            |                           |
|----------------------------|---------------------------|
| 1 cup rolled oats          | 1 cup plain flour, sifted |
| ½ cup sugar                | ¾ cup desiccated coconut  |
| 2 tablespoons golden syrup | 125 grams butter          |
| ½ teaspoon bicarb soda     | 1 tablespoon hot water    |



Directions:

1. Preheat the oven to 160 degrees C.
2. Line a large baking tray with non-stick baking paper.
3. Combine the oats, flour, sugar and coconut in a large bowl.
4. Combine the golden syrup and butter in a small saucepan over a low heat. Stir gently until the mixture melts.
5. In a separate bowl combine the bicarb soda and water and add to the butter mixture. Move this batter to the dry ingredients bowl and mix well.
6. Drop large spoonfuls of the biscuit batter onto the baking tray, allowing room for the biscuits to spread during baking.
7. Pop the tray in your preheated oven for approximately 10 minutes or until golden.
8. Remove from the oven and cool on wire racks.

Note: Store biscuits in a sealed container.

**We were doing  
home renovations and,  
incredibly, when  
we knocked down a wall,  
we found a secret,  
fully furnished room!!  
And then I remembered  
"We live in a duplex..."**

## DVA Benefits.

DVA provides many benefits for both serving and ex-serving men and women, but up until now it has been a bit difficult to track these benefits down, to find out to what you are entitled and how to go about submitting a claim. DVA has recognised this and has been working on a cure. They now have a site which first asks you a few questions to ascertain your position then offers you a number of remedies.

It is a very handy site and you should perhaps add it to your favourites for later. It's here: <https://connect.dva.gov.au/rab/wizard?execution=e1s1>



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*While the Association does not necessarily agree or disagree with everything on this page, we do respect the right of everyone to have their say.*

## Your Say

### EMF'S – Friend or Foe?

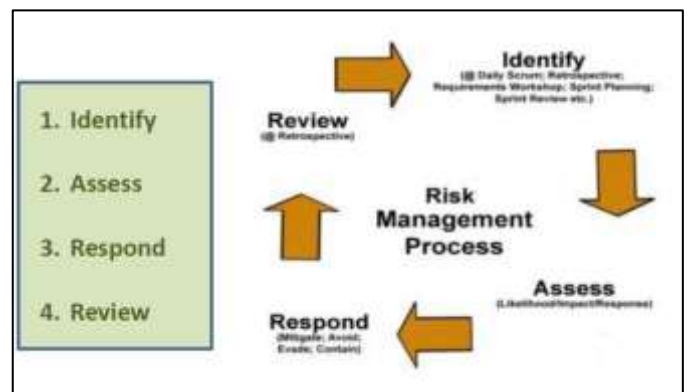
**Les Ferris – 21 Instruments 67 – 76, sent us this, your thoughts??**

A few years back I was getting what seemed like a constant buzzing in my ears. The source was obvious, but I couldn't make it go away or avoid.

Simple fault finding led me to my wife who was constantly telling me of the dangers of EMF's and we need to do something. Now being the mere male that I am I know to never dismiss what the wife is saying as the "I told you so" goes on forever if she happens to be right.

To stop the buzzing in my ears I made it an official project. Now we all know what that means. It did temporarily stop the buzzing. This project loop suited my purpose as I could go on forever making excuses.

While this was going on, I started to think differently about what was happening to me. The constant dry tickle in the throat causing a mild cough was the start, then it was the headaches, tiredness and sleep quality. My forehead – you know where the hair used to be, felt like it was sunburnt when I was in the shower, I also had prickly skin on my forehead.



Being in project mode I started some basic research and I found these symptoms were common with EMF exposure. I dismissed this because they could also be explained by a doctor using some sort of medical jargon.

Then the game changer symptom started. I was sitting at my desk and I could feel a portion of my brain getting warm. Difficult to explain this symptom but it was real and prompted me to act. To describe my home office. I have a Telstra WiFi Modem which has 4 WiFi channels, a WiFi



router and a WiFi printer, a cordless phone base station plus 2 Bluetooth channels. This totals 9 sources of EMF radiation. No wonder I was cooking inside out. I should point out my research to this point also highlighted some people are more sensitive to EMF's than others. I now categorise myself as being more sensitive.

My first attempt to find a solution was to try and shield the Telstra modem. A simple shield did stop the brain cooking so I knew I was on the right track and needed to implement more permanent solutions. First was to turn off the 4 WiFi channels on the Telstra WiFi modem. I did this by going into the modem setup software but then I find a well concealed switch on the modem to turn off all WiFi. Next I move the cordless phone base station out of the office and only switch on the printer when needed. I still use the WiFi router for the phones but it is a low power single channel el-cheapo from Target. I put a physical shield between myself and the modem. The cough, headaches and tiredness were gone. When you have these symptoms and they all go away after these basic steps were implemented indicates to me my original symptoms were a result of EMF exposure.

I was now hooked on understanding how this all works.

EMF's are organised on a spectrum, and classified according to their wavelength and frequency. On the low side of the EMF spectrum, you find long waves with short frequencies like the EMF'S created by a standard 50 Hz electrical outlet. On the opposite end, you find very short waves with very high frequencies like x-rays. These contain enough energy to destroy your DNA or pretty much instantly damage your body. Don't know where radar fits into this spectrum but I do know you never stood anywhere near the front of an F111 with its radar operating.

For the purpose of my exercise I concentrated on RF (radio frequency), Magnetic Fields, Electric

Fields and Dirty Electricity. I initially focussed on learning more about RF in my house. Mobile phones, cordless phones, Mobile phone towers, anything WiFi including baby monitors and any kind of Bluetooth all emit EMF radiation. We are surrounded by RF. Satellites focussing on Australia, Mobile phone towers, TV and radio transmitters and that is external to our homes. Go to your local shopping centre and check (using your phone) how many WiFi channels are in use. What I got out of this research is you cannot do much about what is external but within your home, and this is where it is most

Radio Frequency (RF)

AM/FM TV Wireless Satellite

Radiofrequency (RF) and Microwaves

Common Sources of RF Radiation<sup>6</sup>

Cordless Phones	Smart Meters	Smart Phone (3G/4G/LTE)	Wifi	Microwave Oven	5G (next generation of networks) <sup>7</sup>	Bluetooth Devices
900 MHz	900 MHz to 2.4 GHz	710 MHz to 2.7 GHz	2.4 or 5.8 GHz	2.45 GHz	3.85 to 71 GHz	2.4 to 2.485 GHz

*Copied from Nick Pineault's Guide to EMF's*

important, you can make simple changes. Giving your body time to recover especially during sleep periods is most important. Minimise your exposure by:

- Reduce use.
  1. Minimal WiFi channels
  2. Less time on the Mobile phone and try not to have it close to the body
  3. Turn of WiFi at night



4. Buy low radiation cordless phones. (Siemens DECT Low Radiation phone only transmits when in use)
  - Hard wire your house with Ethernet cable
  - And most important – distance is your friend

To try and make sense of all this I researched and purchased a meter to measure EMF's. I purchased the Cornet Tri Meter for around \$360. This meter measures RF, electrical and magnetic fields so it pretty much covers my needs. It has 3 displays for measurement, Digital, histogram and visual led indicator. (See [HERE](#))



RF Power density measurement is defined as power per unit area and is expressed in units of micro watts per square metre ( $\mu\text{W}/\text{m}^2$ ). The government agency (ARPANSA) has a 136 page document to read but with a warning it is not designed to be a simple and easy read. (See [HERE](#))

I should point out this meter is limited in its frequency range. It does not read the high Ghz range. To do this requires an investment of around \$20,000. Cyril Bourke made such an investment. Cyril was trained as an electronics and industrial engineer with IBM UK, British Army Royal Signals and served in the Special Air Service. As an EMF environmental consultant, Cyril provides professional testing, safety planning and mitigation technology. Nick Pineault a recognised researcher on EMF's met with Cyril recently. Here is a brief description of their findings.

*I'm not easily surprised, but I was left speechless when top engineer Cyril Bourke showed me the numbers on a professional-level EMF meter that's worth well over \$20K. In the middle of the Australian countryside, Cyril measured a whopping 2,000 microwatts/m2. That's an incredibly high ambient amount of electrosmog, in an area where there are no cell phone towers or wifi routers nearby.*

*But what shocked me the most is that the bulk of all this radiation is above 10 GHz, which means that my Cornet, Trifield, RD10, Acousticom 2 or any other "cheap" meter I currently possess wouldn't read any of it. In fact, all of these meters would display a number near "0" in Cyril's area -- giving me a false sense of security.*

The Baubiologie Maes / Institut für Baubiologie ([www.hbelc.org](http://www.hbelc.org)) a German organisation has published their Building Biology Evaluation Guidelines for sleeping areas. They are incorporated in the visual display of the Cornet meter.

The Building Biology Evaluation Guidelines are based on the precautionary principle. They are specifically designed for sleeping areas associated with long-term risks and a most sensitive window of opportunity for regeneration. They are based on the experience and knowledge of the building biology community and focus on achievability. In this chart it recommends avoiding EMF's above 1 microwatt/m2. A hell of a contrast to the 2,000 microwatts/m2 above. So why am I not affected by this external constant RF radiation. I can only guess distance is my friend.





Totally confused now – I understand but I will say if I was to accept the government standards as normal and acceptable I would be in a lot of trouble. This is an ongoing argument and there won't be an outcome on acceptable safe levels for many years. In the U.S. FCC acceptable levels is 1000 micro watts per sq. metre over 30 minutes.

Meter readings in my office were very high according to my meter. With the WiFi and phones switched off at night I have achieved the ideal measurement (green LED) for the most important daily recovery period – sleeping. My overall recovery period was short (about 2 weeks) and this was encouraging but I will say I think my body is now more sensitive than before. To explain:

**Wireless (Radio Frequency) Radiation Intensity Guidelines**

Wireless Radiation Intensity Ratings (Radio-Frequency Electromagnetic Fields) Background/24-hr Averaged Readings (Inside Home/Office)		
Ideal	0.001mW/m <sup>2</sup> or less Target for sleeping areas (see point 1 below)	Typical Home & Office Levels
Low	0.001mW/m <sup>2</sup> - 0.01mW/m <sup>2</sup> Low exposure levels	
Elevated	0.01mW/m <sup>2</sup> - 0.17mW/m <sup>2</sup> Some people may show symptoms of ill health	
High	0.17mW/m <sup>2</sup> - 1mW/m <sup>2</sup> (see point 2 below) Increased symptoms of ill health	Seek to Reduce Levels
Avoid	Above 1mW/m <sup>2</sup> Avoid for extended periods	

1) Bau-Biologie ([www.hbelc.org](http://www.hbelc.org)) exposure standard for sleeping areas inc. detector meter accuracy factor  
2) Seletun Scientific Declaration (authored by leading EMF scientists) exposure guideline is 0.17mW/m<sup>2</sup>

For some strange reason I decided to replace my single band low power WiFi router with a dual band WiFi router. All those nasty symptoms started to return. My exposure was for about 3 hours each morning in my office. Switch back to the old WiFi router and all is OK. The doctor called the red sensitive spots appearing on my face as mosquito bites and prescribed some sort of ointment. Funny how they never went away until I changed WiFi routers.

During my learning and testing period I did a walk around a mobile phone tower and took some measurements. Measurements were taken from the base out to about 400 metres down the nearest street with houses. At about 300 – 400 metres the reading was at its highest.

Now to put things into perspective. The readings 300 metres from the tower were about the same as being next (<1m) to my old cordless phone. So why are we concerned about mobile phone towers you are all thinking. Well the answer is simple. I replaced my cordless phone to a zero RF emission phone when not in use, I switch off the WiFi router at night, I put distance from any other source wherever possible. What I cannot do is switch off the phone tower, it operates 24/7 and the exposure is constant for those close by 24/7.



Now is a good time to clarify an earlier statement – distance is your friend. When I was taking readings the further from the source the less the RF radiation. For the cordless phone the RF radiation readings reduces within a short distance like 2-3 metres, but it is still there so if you put distance between yourself and the source you are minimising your exposure. My blood boils when I see ads on TV where they position a WiFi router on the bedside table. This is absolute madness and unnecessary.



As mentioned earlier there are other sources of EMF's in the household. These being electrical and magnetic fields. Sources of electrical EMF's include household wiring, Power strips, ungrounded electronics, cords and chargers, lamps and lighting. Sources for magnetic fields include Charges for electronics, high voltage power lines, electrical switchboards and faulty wiring.

When researching I found most of the horror stories were from the U.S. where their electrical distribution for many of the early houses was just active out and earth return (no neutral and unbalanced). I couldn't find any sources which I could describe as being unhealthy in my house. Unlike the U.S. our meter boxes are metal and earthed. This shields the point of highest concentration.

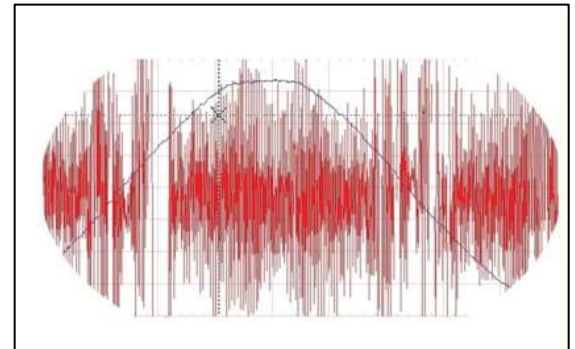
Electrical (Power Frequency) Radiation Intensity Guidelines		
Electrical Radiation Intensity Ratings (Power-Frequency Magnetic Fields) Background/24-hr Averaged Readings (Inside Home/Office)		
Ideal	0.5mG or less Target for sleeping areas (see point 1 below)	Typical Home & Office Levels
Low	0.5-1mG Average living and office levels	
Elevated	1-2mG (see point 2 below) May affect those that are sensitive	Seek to Reduce Levels
High	2-5mG (see point 3 below) Increased risks of serious health problems	
Avoid	Above 5mG Avoid for extended periods	

1) Bau-Biologie ([www.hbelc.org](http://www.hbelc.org)) exposure standard for sleeping areas inc. detector meter accuracy factor  
 2) Seletun Scientific Declaration (authored by leading EMF scientists) exposure guideline for habitable spaces is 1mG  
 3) Increased risk of childhood leukaemia based on globally recognised studies

At this time my neighbour was also researching following an over the fence conversation. Her sleeping position was on the other side of their meter box and this worried her. I tested with my meter and it was all OK. She still made her husband sleep on that side of the bed.

For future planning I would avoid having any electrical wiring in the wall behind my bed.

**Dirty Electricity** – this was a new one for me. Normally, the electricity inside the wires running through the house oscillates at 50Hz. The problem is that modern electrical equipment like switch mode power supplies have been specifically designed to operate by interrupting the current flow many times per second. This has the effect of corrupting the electricity creating “dirty electricity”. When the electricity in your house is “dirty”, it constantly irradiates these spikes of intermediate frequency electric fields. A building biologist would explain this is not ideal for the household environment.



Main sources which create dirty electricity include compact fluorescent bulbs, devices with switch mode power supplies (charges), Solar panel inverters and dimmer switches. Faulty wiring also causes dirty electricity. My research led me to the Stetzerizer micro surge meter. ([HERE](#)). This is a proprietary device with a proprietary reference scale (\$AU250). This meter is designed to separate the power line frequency to detect and respond to low level high frequency voltages caused by transients and harmonics on power lines. The level of these voltages is measured in GS (Graham-Stetzer) units and will vary with electrical equipment and loads. According to the experts the ideal measurement using this meter is 50. My house ranged from 250 to several thousand depending on the circuit. With the desire to have the sleeping area as best as is achievable I purchased a Stetzerizer filter (\$AU100) for the bedroom circuit. This reduced the reading to below 50. This means a happy wife so was worth it even if I don't understand the technology. The effectiveness of the filter [HERE](#)



Beside the regular “I told you so” from you know who, I found this an interesting process. The question will always remain for others as to whether EMF’s are harmful to our health or not. I raised this many times with my wife her response was always the same – remember tobacco. The question for me is how long before we get to the stage where it is recognised as a health hazard. Because of the reliance of this technology I fear this will always be squashed. This means your only option is to make your home and where you sleep as safe as possible.

Mobile phones are also a fixed part of our lives today. I used my RF meter to try and understand a little more. My iPhone 5 emitted very little RF in idle mode possibly because I have Bluetooth turned off and in airplane mode all the time. I did confirm the antenna is at the back and regularly pings the closest tower. This is a spike about every 5 seconds. This spike did not register when I put the meter next to the screen. I do carry a phone with me in my pocket but the screen is always facing my body. I was very surprised by the RF coming out of a more modern phone with everything on. The very obvious red LED’s lighting up on my meter when placed next to the phone did surprise me. Once again – distance is your friend and is the only option available. Leaving the phone on and next to where you sleep is not good and should be avoided.



- Safe homes:
- Minimise WiFi
- Turn off every RF transmitter at night – phones, modems etc.
- Minimise dirty electricity

(In fairness, [THIS](#) article should also be read – tb.)

## Ross Robert Burrows

Neil Burrows got in touch, he says: Hi, I'm trying to find out more about Ross Burrows' (my deceased father) service with RAAF 3 Telecomm Unit. He was a Telegraphist with the unit from about 1948-1954 and was involved with the Totem tests, I think, as a radio operator on a Lincoln and he also served in Labuan in 1951/2. (Ross is on the right in the photo at right) There is a brief history on the Unit's Association website, which seems defunct? I think at the time some of the Unit's operations,



such as in Labuan (then British North Borneo), may have been 'classified' because dad was reluctant to talk about it, apart from saying he spent long shifts taking down Morse code, mostly transmitted by the Indonesian and Malay? military and I know his letters home were 'censored'.





He was an amateur photographer and used the dark room at the 'base' to develop and print his pics. a pic given to dad after the Totem 1 and 2 program at Emu Field, SA. Scribbled in the bottom right hand corner (difficult to see) is "In appreciation of your efforts" signed by a high ranking officer. He didn't speak much about what he did - so I'm keen to learn more now that more than 60 years has passed since he served with 3TU.



Further to my last email - he was in Labuan 1951/2. The pic at right (poor quality) was taken I believe at Ballarat.

Dr Neil Burrows AFSM



## ATR2A

Steve Beveridge (VK2LW) wrote, he says: "Hi - I'm a ham about to start a major rebuild of an ATR2A. I believe it was used by the RAAF in 1941/42, mainly for mobile use (with a genemotor), though a 240V supply was available. It is a low powered unit, about 25W, CW and AM..I have been able to get the manual for the ATR2B, but would prefer to get the 2A manual if possible.



Any assistance you can provide would be most appreciated."



## Frank Hodges.

Frank was a TelsTech and served with 2 Sqn in Vietnam from Mar 1970 to Mar 1971. He says:

"I email you Australians as you swore allegiance to this country as I did and served and still serve the Australian people without fear or favour. I am a 73 year old vet, past businessman and employer, father and grandfather and someone who has worked 16 hour days building this country and I am pissed. My grandfather and father who spilled blood for this country would be pissed also if they were alive today. How have we let it get to this? Where do I start?"

First and foremost. The majority of our politicians federal, state and local lack integrity, loyalty to Australia, qualifications for the job with none of life's experiences nor experience running a business or organisation, or competence and yet we expect them to run the largest business in Australia. Parliament is a shambles with time spent trying to make cheap political points rather than plan for our future and run the country. If a company's board was run like that it would fail dismally and be wound up but the taxpayer's money keeps rolling in and the party continues. Mark Webber got it right when interviewed at the F1 in Melbourne when he said he no longer lives here as Australia is a Nanny State. Look at the quality of our state premiers. They totally just don't get it business wise and





our very freedoms are at stake. I never thought so before, but we definitely need a Bill of Rights now. We are over-represented by lawyers and political hacks.

How can it be that our politicians do not even have to pass security checks as do our military, police and doctors and nurses etc? How can it be that politicians do not have to pass selection criteria as fit for purpose nor have a job description and key performance indicators (KPI) as do all other private and public sector employees? How can it be that the Australian taxpayer continues to fund the ABC which is anti Australia, anti-government, sympathetic to terrorists and continually abuse President Trump and the USA who are our strongest ally, yet openly support foreign powers prejudicial to Australia's interest?

Covid 19 : We blew it! Australians aren't in this all together! The private sector has taken all the pain and the public sector and our politicians will come through unscathed financially. Although I am aware that some have made salary sacrifices, I do believe you know where I'm coming from. There is serious pain out there in the private sector. If politicians and the public service had taken a haircut in solidarity, the private sector would not feel so disenfranchised and betrayed. The governments arbitrarily shut the private sector down while the public sector was largely left untouched.

How can the federal government let the States close the State borders when it is not warranted medically and further damage the economy when it is questionable as regards the constitution and yet leave it to Pauline Hansen to challenge?



I have lived through the polio epidemic, TB, SARS, Swine etc and we panicked then. Even the modelled loss of life will be insignificant compared to the loss of life due financial losses and security in the years ahead. Politics and the media called the tune and it's still happening. Governments are responsible for having counter disaster plans in place for world wars, natural disasters or pandemics but they refused to listen to advice to do so and place into storage obsolete equipment for defence and medical such as ventilators. They destroyed thousands of them against my advice and others. The states and their various boards run on politics not the interests of the tax payer. The federal government have a health department of thousands but don't run a single hospital.....hello!

I built and ran a Biomedical engineering Company responsible for all biomed in the 42 hospitals in North Australia for 30 years without a single death or injury on our watch. We designed, manufactured, supplied and taught clinical staff how to use ventilators and other critical life support equipment. Are you aware that some 18,000 patients die P.A. by what is termed "misadventure" in Australia's health care system and we listen as though it is gospel from medical experts when they can't even clean up their own industry. We should take on board medical advice as to how best treat the disease but then the logistics decision should be left to our elected decision makers with input from business but not un-elected bureaucrats. I was the first whistle blower against Qld health advising the minister of corruption. In retaliation I was investigated by The CJC for corruption myself but in the washup, the minister Gordon Nuttle went to jail and not Me. It was character building though. It was a lesson on how the state can turn on its citizens and they're doing it again and I thought us fellas fought for democracy. And look what the establishment is doing to Ben Roberts Smith VC and our military in general. We have neutered our military. Soldiers will revolt and down arms shortly. Many have already spoken with their feet.





China ( and other foreign nations) : A lot know more than me on this although I did spend a month in China self-funded on a Qld Gov led trade mission in 1997 and dined with the Polit Bureau (communist party) each night and got a bit of an insight where they were heading, meanwhile our politicians spent their time grovelling and apologising for Pauline Hanson and her other 10 elected members of the Qld Gov. The Chinese foreign minister said to me [very late one evening] through our interpreter "you Australians have an Achilles heel, in Pauline Hanson. Your politicians are very sensitive about her and we do not give a flying F... I then said 'how about Tiananmen Square and Wong said 'let's not mention that" I then ripped it up our politicians at breakfast for apologising to the Chinese for duly elected members of our government. And look at The Victorian and WA governments stance on China. China have infiltrated our universities and the Labor party and bought too many strategic assets in this country. Sam Dastyari should be in jail for treason.



My guess would be Mike Pompeo asked Marise Payne to call for the international inquiry as to the origin of C9 and America would have our back. More to see here in the coming weeks I'm sure. China feel they are now big enough and strong enough and are fast getting out of control. They accomplished this in 20 years. They hack our systems, steal our technologies, infiltrate and intimidate and intend to be the dominant power whatever it takes and we kid ourselves if we don't believe we are in their sights as a major prize. Large mass of land with huge natural resources virtually uninhabited by world standards and undefended by world standards. Maybe we should invite Israel to build a satellite country in Alice Springs!

People, we have to rebuild our military again very quickly. We need a major deterrent. I fear we will have a major conflict with China in the next 3 years. We could sustain a small war for maybe two weeks I believe. The submarine fiasco, fuel, bombs and bullets etc. You know what I mean. We need manufacturing back pronto as we do food production water and base load power. However the main stumbling block to this will be politics and bureaucrat approvals, (example : try and get any Australian manufactured medical equipment through TGA) the red green tape and don't I know it, I've been there. An example of what we can do and are capable of is the Wagner family built an international airport in Toowoomba in under 2 years from start to finish for around \$A900M as I remember. Successive governments are still talking Badgerys Creek some 40 years later at \$A8B and not a sod turned.

Anyway, my thoughts as a constituent and patriotic Australian. I don't profess to know it all but have seen and experienced a little in my 73 years and right now we need to do better. Many Australians I speak to feel as I do but our politicians and their unelected advisers just don't get it!

Does anyone know which page of the Bible explains how to turn water into wine.  
Asking for a friend.



## Living the US.

Bill Heussler says:- “Right now I’m waiting for summer, keeping a few bees and occasionally working on my son’s farm. I’ve been here off and on since 1982. My wife’s from here, but we never did agree where we’d live long term. Tried QLD, Minnesota, UK, Minnesota, Sydney, Minnesota, Germany, Minnesota, Brazil, Sydney, Minnesota. Two grandchildren here now, so I think our peregrinations are done.

I do enjoy the Radschool magazine. Good to see the photos proving that I’m not the only grey beard in the world. I was 43 RMT and 3 CRU and occasionally see John Mackie, John Russell and others in your pages”.

Yesterday my husband thought he saw a cockroach in the kitchen. He sprayed everything down and cleaned thoroughly. Today I'm putting the cockroach in the bathroom.



## Ballarat in 1956.

Joy Comben writes, she says: "I had no idea there was a Radschool Association. I was on a Teleprinter Operator's course at Ballarat July 1956, don't remember the course number and was posted to Frognall about Xmas 1956 (our course was held back pending arrival of other members from rookies), then it was back to Ballarat in 1959 for a couple of months prior to discharge for marriage. My single name was Lorraine (Shane) Harrison, I would like to see if anyone else from that time is still about."

If you were, let us know and we'll put you in touch with Joy. tb



## 55 Years and Still Counting.

Twelve members of Number 19 Radio Apprentice Course gathered in Canberra on Friday the 27th February, 2020, 55 years after 35 boys arrived at Radio Apprentice Squadron Laverton to start their careers in the RAAF. Twenty-seven young airmen graduated 32 months later.

They had planned to hold a reunion on the second weekend of January this year, on the anniversary of our enlistment, however the bush fires on the eastern seaboard intervened and the event was postponed. The reunion was also an opportunity to dedicate the 19 Radio Apprentice Course plaque at the RAAF Memorial Grove. (Click it for a bigger view).

[Julian De Ross's](#) widow and two of their children joined them for some of the weekend's activities.

On Saturday morning they 'paraded' at the RAAF Memorial Grove to dedicate their course plaque. Following a welcome and introduction by Allan George, 'Padre' Rolf Roelfsema gave an address in memory of Big Julie who had passed away in December 2019. Rolf followed this with a prayer for the dedication of the plaque.



L-R: Chris Robins, 'Rolf' Roelfsema, 'Suds' Purcell, Allan George, Paul Hewitt, Garry Thomsen, Rick Toholka. AVM 'Mac' Weller AM, Arnie Vereschildt, Barney Jones, Kevin Smith, Stew Deans, Dave Lugg OAM.

They were then honoured to have Air Vice Marshal 'Mac' Weller AM (retired) dedicate their plaque. AVM Weller of Number 12 Engineering Apprentice Course (Wombats)) through his long



and distinguished career, had an in depth understanding of the apprentice scheme and its history; this was reflected in his outstanding dedication address. An extended lunch at the Ainslie Football Club followed.

Food, drink, frivolity was in abundance at Saturday night's reunion dinner. Sunday afternoon saw them on a conducted tour of the Australian War Memorial, including attending the Last Post Ceremony where Allan George and Arnie Vereschildt laid a wreath on behalf of 19 Course. An obligatory dinner and celebratory lemonade concluded the day's activities.

On Monday morning they toured the Canberra Deep Space Communications Station at Tidbinbilla, before the group dispersed to all corners of Australia. Planning is underway for a 2025 reunion in WA.



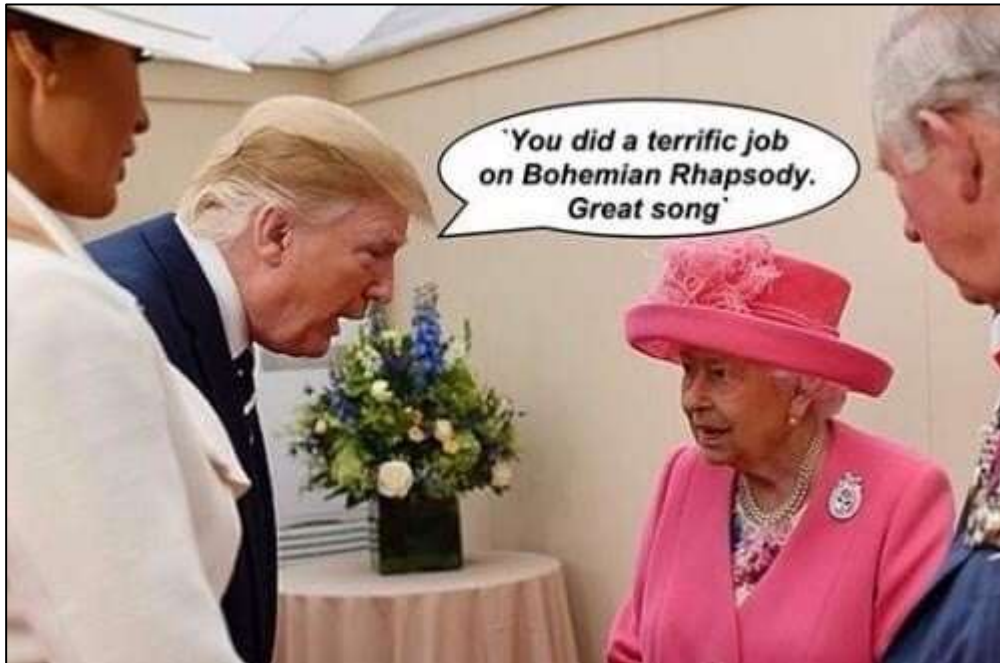
**L-R:** Chris and 'Suds' Purcell, Jane George, Stewart and Dianne Deans, Allan George, Marilyn and Arnie Vereschildt, Barney and Kim-Marie Jones, Dave and Wendy Lugg, Joel De Ross, Chris and Lin Robins.

The Reunion group visited the Canberra Deep Space Communications Complex where the 'groundies' were very impressed at the size of some of the hardware. The 'earthlings' are pictured





in front of the 70m Deep Space Communications Antenna (the largest satellite antenna in the southern hemisphere).



## Avalon Airshow.

The Avalon Airshow, which was to be held in Feb 2021, has had to be delayed due to the Corona Virus. After extensive consultation and review, it became clear that the impacts of COVID-19, including lengthy logistical lead times and uncertainty about availability of international travel, would pose unacceptable risks to AVALON 2021, should it continue with its original February dates so a later date was settled on. Trade days will now be from Tuesday 23rd Nov to 2PM on the 26th Nov and Public days will be from 2.00pm on the 26th Nov to the 28th Nov.

That year the Airshow will feature and celebrate the 100th anniversary of the formation of the RAAF.





As one of the world's great air shows, AVALON is the most spectacular and the most comprehensive aviation, aerospace and defence event in the Indo Asia Pacific region. It is Australia's largest combined business exposition and public entertainment spectacular.

It will be a spectacular not to be missed, put it on your bucket list

## **Delivering the RAAF's Centenary Commemoration.**

On 31 March 2021, the Royal Australian Air Force will mark 100 years as an independent service. 2021 will be an important time to reflect on our enduring contribution to the security of Australia.

Air Force is planning a national series of events and initiatives that will honour the sacrifices and service of the last 100 years, demonstrate today's highly capable force, and foreshadow our continued evolution into the future. The Centenary program will be one of the most comprehensive public engagement program ever undertaken by Air Force. It will include the largest air show conducted in Australia and activities likely to involve a member of the Royal Family.



Air Force established the Air Force 2021 Branch, dubbed Air Force 2021, which will deliver the commemoration activities of the Royal Australian Air Force's centenary during 2021. The AF2021 team is headed up by Director-General Air Force 2021, AIRCDRE Andrew Elfverson. Andrew leads a small team of five groups who report to him. Operations and Plans led by WGCDR Rosemary Johnson, Strategic Communication led by WGCDR Ivan Benitez-Aguirre, History and Heritage Coordination led by GPCAPT Ernie Walsh, Community Engagement and Base Liaison Officers led by WGCDR Tammy Dyson and Industry and Youth Engagement headed up by GPCAPT Ross Jones.



Working from sites at Defence Establishment Fairbairn, ACT and Defence offices in Raymond Terrace, NSW the team is working hard to deliver the centenary commemorations, while working around the restrictions caused by the COVID-19 pandemic that is affecting every public activity in Australia. Crucial to the success of the commemoration are Base Liaison Officers (BLO) who will enhance a local focus on activities at RAAF bases. Bases will conduct their traditional Air Force Birthday events prior to 24 March 2021 to allow support, as required, to the major event in Canberra on March 31.

BLOs will be critical in coordinating local activities during 2021 to be celebrated as part of the centenary range of events. Another primary role for BLOs is to enhance communication with base personnel and local RAAF Veteran groups to keep them informed of activities and planning as Air Force heads to its 100th anniversary.

Don't wait until your deathbed to tell people how you feel.  
Tell them to piss off now.

## Wallaby whisper.

35 Sqn out at Amberley, which now operates the Spartan aircraft, continues the tradition started when 35 Sqn operated the old Caribou from Vung Tau back in the 1960s. 35 Sqn when operating in Vietnam, operated under the name of [Wallaby Airlines](#) and now with the new aircraft it has decided to continue with the name.



The Sqn now issues a regular newsletter called the "Wallaby Whisper" and you can see the latest version [HERE](#).



## DFRDB Update May 2020.

Click [HERE](#) and [HERE](#) for updates.

Those of us who only served a short while in the ADF and are not relying on DFRDB to put bread on the table, really have no idea of the huge injustice that those that do have been dealt. In our society, it's unimaginable that a Government would deliberately lie to and steal from its people, but that it seems is exactly what has happened.

Have a look at [THIS](#).

In February of this year, Ken Stone wrote to the Prime Minister, Scott Morrison, (see the letter [HERE](#)) asking for the PM to intervene and to remedy the injustice immediately.



As yet he hasn't received a reply.

Perhaps it's time we all started to write to our MPs declaring our disgust and demanding this DFRDB injustice be remedied.

## Coroner calls for Department of Veterans Affairs to be subject to independent audit of veterans' complaints.

A Victorian coroner has recommended the Department of Veterans Affairs (DVA) be subject to independent audits of its handling of veterans' compensation claims following an inquest into the suicide of Army veteran Jesse Bird.

Key points:

- Coroner recommends DVA be subject to independent audits of handling veterans compensation claims.
- The coroner was investigating the death of veteran Jesse Bird, who had lost a permanent impairment compensation claim.
- Mr Bird suffered from post-traumatic stress disorder, major depressive disorder and alcohol abuse.





Coroner Jacqui Hawkins called for the role of National Commissioner for Defence and Veterans Suicide Prevention to be dramatically expanded to allow for broader reviews of DVA processes, and investigations into complaints about the Department made by veterans.

Coroner Hawkins found that DVA had acted contrary to policy and legislation and that it handled Mr Bird's permanent impairment claim without compassion or empathy, leaving him devastated. She included several recommendations in her report, amongst them was:



**Recommendation Three:**

I recommend that the Minister for Veterans' Affairs and Defence Personnel take the necessary steps to harmonise the legislation governing the veterans' compensation and rehabilitation scheme to:

- 1 ensure that the claims system is 'fit for purpose', reflecting the needs of veterans now and into the future;
- 2 reduce complexity in the compensation system by streamlining and simplifying the claims process;
- 3 remove inconsistencies between the Acts to ensure fairness and equity ineligibility and benefits; and
- 4 ensure the legislative framework reflects veteran centric practices.

This recommendation is very relevant when you consider the difference in benefits provided to those on VEA and to those on MRCA. (see [HERE](#)). We can only hope her recommendations are taken up. We have written to the Minister asking if the Government intends to accept the recommendations, we'll let you know when we get a reply.

You can read the full report [HERE](#).

## Planet of the Humans.

Michael Moore, that dashing, debonair and very controversial producer of documentary films, recently released a movie which, in a nut-shell, says that green energy cannot solve the problem of society's expanding resource depletion unless we all start to use less, which is by definition unsustainable given that the Earth is finite - (whatever that means!!).

The film argues that renewable energy sources, including biomass energy, wind power and solar energy, are not as renewable as they are portrayed to be. The film has generated controversy and been criticized as partially outdated and misleading.





It's not everyone's 'cuppa tea' and we'll probably get a heap of hate mail for including it here but it's a point of view that perhaps should be considered.

The film was temporarily taken down from YouTube on the 25<sup>th</sup> May 2020 in response to a claim of copyright infringement. The take down was challenged and, twelve days later, YouTube removed the restriction, allowing the film to be viewed again on Moore's channel. The filmmaker responded, "There is absolutely no copyright violation in my film. This is just another attempt by the film's opponents to subvert the right to free speech."

You can watch it [HERE](#).

## Appy Reunion, Wagga, April 23<sup>rd</sup> to 26<sup>th</sup> April, 2021.

All Appies are invited to attend a reunion/celebration in Wagga next year to celebrate the 100<sup>th</sup> anniversary of the formation of the RAAF. Costs for the event have yet to be finalised but they will soon be made available on the Appy website ([HERE](#)). At the moment the site says that Registration is closed, read that as not yet open, once things are finalised everything will be made available and you'll be able to register.



Following are the events that are being planned:

### Friday 23<sup>rd</sup> April 2021 Time TBA

Meet and Greet at the Range Centre 308 Copland Street Wagga - cost TBA

### Saturday 24<sup>th</sup> April 2021 Time TBA

Bus trip to Temora Aviation Museum (and hopefully a flying day at the museum) - cost TBA

### Sunday 25<sup>th</sup> April 2021 ANZAC Day

- Dawn Service for those wishing to attend at either Kapooka, RAAF Wagga or the main Wagga Cenotaph which is located in Baylis Street next to the lagoon.
- 1000 Hours - Main Anzac Day March from location TBA to the Wagga Cenotaph

### Monday 26<sup>th</sup> April 2021

- Time TBA - Tour of RAAF base Wagga and Heritage Museum (subject to approval)
- Time TBA - Celebration Dinner at the Range Centre - cost TBA

More later when things are finalised.

Why is it that at reunions you feel younger than everyone else looks?



## Protests in Melbourne.

There's a bloke in Melbourne called Avi Yemini who is of the Jewish persuasion. He is a very right wing bloke and gets himself into quite a bit of trouble – mainly because of his right wing views. It's funny but you can have the most way out left wing views and that's acceptable, but go a little bit to the right and you're classified as some sort of a nutter who doesn't have a clue about anything. One way or the other, the left will pursue you vigorously and try and crush you, sometimes viciously.



Surely the sensible thing would be to look at the message, not the messenger - wouldn't it? Doesn't seem to work that way.

Recently Avi took his microphone to the streets to interview people out protesting for “black life matters.” Some of the comments are interesting. You have to wonder where those thoughts are coming from - is it the schools? universities? the media? - why are people thinking that way? - it's sad really.

You can watch his interviews [HERE](#).

The rain was pouring down outside O'Connor's Irish Pub There standing in front of a big puddle outside the pub was an old Irishman, drenched, holding a stick, with a piece of string dangling in the water. A passer-by stopped and asked him, "What are you doing? "Fishing" replied the old man. Feeling sorry for the old man, the gent says, "Come in out of the rain and have a drink with me". In the warm ambiance of the pub, as they sip their whiskies, the gentleman, being a bit of a superior smart ass, cannot resist asking, "So how many have you caught today. "You're the 8th", replied the old man.





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