SITREP

AIR FORCE ASSOCIATION NSW - NEWS AND VIEWS

A Fungal Infection Almost Brings Down Mirage

From Roger Lowrey

This is the story of a Mirage incident that occurred in 1968 at Butterworth. It was written quite some time ago but I never distributed it as it points to a major mistake on my part! However, that's all in the past now and I guess we have all made mistakes.

'Cladosporium resinae was present in 78% of all fuel samples from aircraft tanks examined in Australia (Hazzard, 1963) and in 80% of all fuel samples examined in California (Engel and Swatek, 1966). It is probably the most important micro-organism in contamination of fuels and in corrosion at the present time (Parbery, 1968)'.

On the 14th of February 1968, I was flying A3-34 (assigned to Brian Sweeney) as wingman to SQNLDR Allan Taylor on a strike mission against the 'enemy' forces based in Singapore. Our Mirage aircraft were the RAAF's original 111 0/F models, lacking the control automatics, air to ground radar, doppler, etc that were added to this great little fighter at a later date. *(The designation Mirage IIIO is of interest. With some degree of humour, Dassault proposed the designation Mirage IIIO for 'Ostralia' as the suffix letter 'A' had already been allocated to ten pre-production Mirage III airframes).*

RAAF Mirage 1110 with centreline and supersonic wing tanks visible

Our jets were configured with a centreline (C/L) 286 gallon tank, two 110 gallon supersonic tanks, gun bay and rocket bay tanks and of course, the normal internal tanks. However, this was

the first time we were carrying the C/L 286 gallon tanks that had recently arrived as deck cargo from Australia, and this gave us far more strike planning options. We were fully briefed on the cockpit indications associated with this new tank configuration.

So we lit the afterburners on time and climbed out to FL360 heading for Kuantan, where we turned south to follow the coast and descended to 500' at 420 knots for our final approach to the Singapore target area. At Tanjung Sedell we turned SSW for our target Seletar; our eyes now out on stalks looking for hostile RAF Hunters or Lightnings that could be flying defensive Combat Air Patrol (CAP) or less likely, had been guided towards us by Singapore radar. As we approached Johor River, we spotted a Lightning crossing our path some two miles ahead and at about 1500'. It was almost certainly a CAP aircraft but he didn't see us and we passed behind and began accelerating to our strike speed of, as I recall, 500kts.

Our dive-bombing pass on the runway at Seletar was performed with the elan and precision expected of us sterling fighter pilots without another hostile aircraft being sighted. From Seletar we formed back into pairs-patrol as we commenced a burner climb to FL360 again as we headed NW for Butterworth. The burner climb was performed to make it almost impossible for any 'hostile' aircraft to successfully intercept us on the way out, and was made possible by the addition of the centreline 286 gallon tank. Again, our eyes were out on stalks looking for any RAF aircraft that might somehow get into our six (behind us), but any opposition that did so would have stood out like the proverbial sore thumb against the white background as we climbed through many layers of broken cloud. As expected, we reached cruise height without hindrance and settled down to concentrate on the remaining flight home.

But shit, my fuel needles were indicating lower than expected! After the first shock, I remembered that I need not be too alarmed by this as it was a common enough occurrence after prolonged afterburner use. But shortly after, not only had the fuel needles not returned to normal, they had dropped further and if the indication was true, I could not reach Butterworth. I checked everything that could control fuel from the cockpit but all switchery was as required. Then, to my horror, calculations showed I could not return to Singapore either!

I notified my leader and put out a PAN call; although with such a sparse UHF network, I doubted anyone would receive it. What options remained? We were now above 8/8 cloud coverage and below that I could expect cloud layers extending to quite low level – and the cloud was increasing as we progressed. But the only airfield within my fuel range was Kuala Lumpur (KL), at the time, a small civil/military airfield without UHF. Al Taylor had done the same sums and reached the same conclusion and then indicated he could see what looked like an RAF Andover way below us, just above the cloud, that might be doing a holding pattern for KL.

As I neared the position of the Andover, I started a teardrop pattern to the SW using my air intercept (AI) radar to show me the coast (remember, I had only a 25nm AI radar and no navigation aids). Then I heard Allan talking to Denis Stenhouse who was airborne out of Butterworth in a Sabre. Denis, I think, realised that our distress call had not been received by control authorities at the time and he passed them on; and realising that I only had one option, he passed on some very useful data on the KL airport; data that did nothing to improve my growing concern.

My descent took me through some thick cloud initially, giving way to layers of cloud. At 15,000' I turned left to again position the coastline image across my screen so I could safely descend to low level over water before crossing the coast. Allan now advised me of his need to continue on to Butterworth, stating that he wished me luck, that he would upgrade my distress call to

Mayday and get Butterworth ATC to contact KL ATC by landline and advise them of the situation. Thanks Al!

At 5000' the layers became broken. The 130 gallon warning light was on - I don't remember when I first saw it - and the fuel needles indicated that I had no time for searching! The coastline flashed underneath but as I only had a high-level map of this area, and my radar was useless for overland navigation, and I had no navigation aids, I could not determine my position with any accuracy. The broken cloud below me certainly didn't help.
I saw the usual Malaysian landscape flitting through the breaks with a river out to my right. I needed to go lower and get more forward visibility. A fairly major looking road appeared just on my right heading NE and I prayed it would lead me to KL and its airfield, so I risked getting lower to follow it – I was down to 1000' and made sure I was all ready to eject at a moment's notice. The breaks in the cloud were still quite small and my greatest fear now was flying into ground hidden by the cloud layers. That fear was not helped by the fuel needles which now appeared very close to zero!!

Suddenly a larger gap appeared in the cloud layer below me and the Malaysian landscape opened up around me. There, out to my left, and poking out from under another patch of cloud, was a large runway threshold. Astonished, I quickly turned left to line up, pointed the nose at the threshold, extended the gear and touched down heavily at just under 280K. If I deployed the drag chute at this point, I would simply lose it; so I waited with one hand on the ejection handle as the aircraft crested a small rise and there was a runway extending forever into the distance through the flattened countryside.

I couldn't believe it! The runway went on as far as I could see. At 170 kts I deployed the chute; only to kick myself for doing so, as no chute was required to land on this runway. I found an exit on my right and jettisoned the chute, taxied over to an impressive taxi way and stopped to get my bearings. I also needed to lower my blood pressure, get my breathing under control and somehow get my head to understand what had happened and where I was! In the distance I could see a concrete pan with a few huts around it and, thank God, a truck with two people standing beside it; both looking in my direction. I taxied my way to this pan where I shut down my trusty Mirage; surprised that it hadn't given up beforehand, and prepared to meet these guys. Then as I carefully examined the aircraft for any sign of fuel leaks, I discovered that the C/L tank still appeared to be full of fuel! (The experts later calculated that I shut down with seven gallons remaining in the Inverted Flight Accumulator!)

My two observers turned out to be contracted to QANTAS, examining the site of the still under construction KL International Airport for appropriate QANTAS facilities locations. They were quick to point out that the airfield was not open for service and that I was the first aircraft to land there, and by what authority had I done so. After explaining my situation, their attitude changed completely and they could not have been more helpful. Then, as I looked around with a little more knowledge, I could see in the distance that another huge parallel runway was in the throes of construction; but no buildings had yet been started and, no work appeared to be in progress.

This story ended well for A3-34! The workmen phoned Butterworth to put them at rest; they organised a fuel tanker from KL airport as it was held there for visiting RAF Andovers, etc. They filed my flight plan to Butterworth and they put me in touch with 75SQN's engineering people who advised me to fly her home after performing a bunch of procedures they devised and ensuring that I knew the appropriate refuelling and checklist procedures needed for starting the jet away from ground support. This I did and 'Sweens' got his jet back.

I later found out that the cause of the incident was Cladosporium Resinae. If you haven't heard of it, don't be too surprised; I had never heard of it before Feb.1968! It is a fungus which rapidly spreads when kerosene fuels are contaminated with water. It can block filters, screens and other small apertures, even the drain points of fuel tanks and pump screens. Fungal growth may also become attached to the fuel tank walls and prove difficult to dislodge during cleaning. Apparently, those 286 gallon tanks shipped to us in Malaysia were cleaned out with pressurised water and left to dry before being prepared for shipment. However, in this tank, small amounts of water were retained in the baffles. On arrival at Butterworth the tanks were flushed out thoroughly with avtur and, in this tank, concealing water in the baffles, the Cladosporium spread quickly.

Although I'm no fan of the Mirage's fuel system, and always thought this system may cause problems throughout the life of this little fighter, I have not heard of any similar fuel system problem that almost resulted in the loss of a fighter or the ejection of its pilot. At the time, I was shattered by the thought that I had almost ejected from a perfectly serviceable jet brought to its knees by a microscopic microbe!

The story of the "Messerspit:" when Germans fitted a Spitfire with a DB 605A engine

From The Aviation Geek Club, by Dario Leone

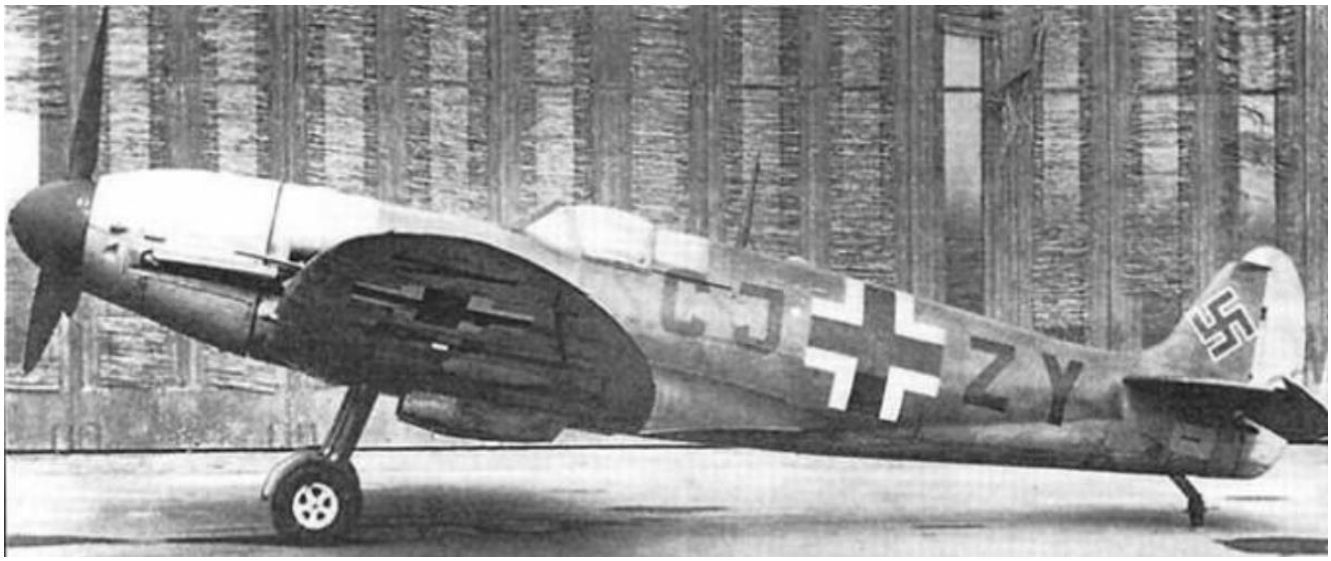
The Spitfire is the most famous British fighter aircraft in history. It became a symbol of freedom during the summer months of 1940 by helping to defeat the German air attacks during the Battle of Britain. It was the highest performing Allied aircraft in 1940.

The crowds at the 1936 RAF Display at Hendon had a first glimpse of the prototype Spitfire in the New Types Park, but it was not until August 1938 that production Spitfires began to enter service. By the outbreak of war, a year later, nine squadrons were equipped. In spite of vigorous demands from France, the Commander in Chief of Fighter Command refused to send any Spitfires to France during the German Blitzkrieg of 1940. The wisdom of that decision was clearly shown. By July 1940 RAF Fighter Command had nineteen Spitfire MkI squadrons available.

The Spitfire, designed by Supermarine Aviation Works (Vickers) Ltd, initially on a private venture basis, was highly influenced by a desire to offer a higher performance than had been previously achieved by the F.7/30 design. This, combined with a further desire to advance the potential of the Rolls-Royce Merlin and Griffon engines, saw their parallel development form an integral part of the Supermarine Spitfire story.

Did World War II German engineers ever put a German engine into a captured Spitfire? 'Yes and they tested it at Rechlin – where it was found to be better than the Merlin version!,' Charles McDevitt, an aviation historian, explains on Quora.

'In November 1942, Spitfire VB EN830 NX-X of 131 Squadron made a forced landing in a turnip field in German-occupied Jersey. The plane was repaired by German forces and re-engined with a DB 605A, amongst other modifications.



'When the Merlin engine was removed it was discovered that the fuselage cross section was virtually identical to that of the engine nacelle of a Messerschmitt Bf-110G. Consequently, a new engine support structure was built onto the Spitfire's fuselage and the DB 605 engine and cowling panels added. A propeller unit and supercharger air intake from a Bf 109 G completed the installation.

'Other changes made were to replace the Spitfire instruments with German types, and to change the 12-volt electrical system to the German 24-volt type. In this form the Daimler-Benz Spitfire started flying in early 1944. 'The ease of switching between upright and inverted V12s should come as no great surprise since the first Bf 109 flew with a Rolls Royce Kestrel engine.'

McDevitt concludes: 'The 'mule' retained the sweet handling of the original Spitfire and was popular with German pilots more used to the wilful landing performance of the Bf-109. Performance with the DB 605 was superb – significantly better than the Merlin version – but then it had had all armament removed and was a lot lighter!' 'It was flown regularly until destroyed in a USAAF bombing raid on 14 August 1944.'

Photo credit: WW2aircraft.net *and* Philip Basson *via Captured Aircraft Facebook Group*

AI Technology Rises to the Challenge

From www.defence.gov.au/news-events, by Emma Thompson, 9 January 2024

Artificial Intelligence (AI) has the potential to deter, shape and change the character of warfare. It presents great potential in the civilian and military domains. In the Defence context, allowing machines to perform certain tasks can free up personnel, reduce operator cognitive load and enable the ADF to focus the talents and experience of our people on the areas that matter most.

To help prepare Australia for the rapid, safe and ethical adoption of trusted AI into military capability, the Defence Science and Technology Group (DSTG) recently hosted The Technical Cooperation Program (TTCP) AI Strategic Challenge (AISC) in Jervis Bay, NSW. More than 150 Defence scientists from Australia, Canada, New Zealand, the United Kingdom and the United States took part in live experiments and demonstrations as part of a program aimed at pushing the bounds of emerging AI technology. Five broad experimental AI streams were featured throughout the challenge, designed to represent different missions and mission-systems. This included AI applied to object detection and identification at the tactical edge, the cooperative employment of shared battlespace resources, supporting the situation awareness of dismounted soldiers, and adversarial AI.

Will Forker and Luis Leal demonstrate the EB-EBEE TAC during the Technical Cooperation Program AI Strategic Challenge 2023 at HMAS Creswell, Jervis Bay Territory.
Photos: Pettty Officer Kayla Jackson

The DSTG Director of Experimentation for the exercise, Chris Shanahan, said the challenge was more than just a demonstration of AI capabilities. “The aim was to put AI solutions under stress in a representative operational environment and different mission scenarios to identify strengths and weaknesses in the technology, so that we can develop more resilient capabilities” he said. Throughout the challenge, Dr Shanahan said there was a strong and continued focus on the responsible use of AI and on the legal and ethical aspects of implementing it into the battlespace. “There’s a strong push to develop a common understanding in relation to the ethical use of AI,” he said.

A range of Defence groups, including Navy, Army and Air Force, were involved in the challenge, bringing end users in contact with AI to accelerate the transition of AI solutions into the hands of the warfighter. The involvement of international partners was also key with Australian scientists and ADF personnel exposed to a broad and diverse program of research in AI – particularly from the UK and US. “The international, collaborative nature of the challenge meant that we are able to leverage coalition capabilities to progress Australian goals,” Dr Shanahan said.

The challenge afforded the opportunity for forward planning and future thinking – with AI likely to be inserted and adopted into a large range of mission systems across Defence in the future. DSTG's Program Leader of AI and Quantum Information Sciences, Associate Professor Robert Hunjet, said addressing the challenges of AI adoption is a key driver for AISC. "We have scientists working together to develop cutting edge technology, but we must remember that these systems are being used by human operators. The tech must be reliable and trusted and comply with legal and ethical frameworks. The AISC brings together great minds from five nations to collectively look at issues such as performance under adversarial conditions, trust, and responsible AI to address these issues," he said. "AI is here now. It's time to leverage its efficiencies and build cohesive human-machine teams."

77SQN Loves Crumpet!

From Tom Grieves

Back in the late 1970s before the current era of oppressive political correctness, I was a SGT attached from 2OCU to 77SQN (Mirage) for a Public Relations/Air Show deployment from RAAF Williamtown to RAAF Pearce in Western Australia, a distance of nearly 4000 kilometres. One evening on the deployment, we gathered at the local 'Red Roof' pub in the nearby village of Bullsbrook. We were entertained by a local rock band that we found very appealing. Strangely, the first prize of the pub raffle that night was a date with the band's drummer. I don't remember who won the raffle!!

The following day we invited the band on-base for an 'unofficial' photo to be taken by our squadron 'Photog'. An aircraft was prepared as a static background for the photo, and the band posed as requested.

The Band!

A passing WGCDR was attracted by our activities and had an immediate fit of conniptions at what he observed. He thought we had hand painted the camouflage surface finish of the fuselage of the aircraft with white house paint. We had only stretched a few yards of Howard green bunting from intake to the tail pipe 'turkey feathers' and painted on that.

The attached photos are self-explanatory. I am the one with the port main landing gear strut behind my head.

Mirage Ejection Statistics and My Own Ejection

From Marty Susans

During the service life of the RAAF Mirage there were 25 ejections, all successful, except one which was unfortunately below the envelope. I think we can conclude that the Mirage escape system, and those who serviced it, did a great job.

The major cause of ejections, 14 of 25, involved the engine - ancillary drive, fire warning, compressor stall and birdstrike/ricochet etc. Not all these losses were engine faults, some resulted from human factors either on the ground or in the air, and others were operational hazards. It seems to me that most of these ejections would not have occurred had the aircraft been twin-engined.

A second major cause of ejections, eight of 25, was undercarriage - failed to lock in lateral position. The remaining three ejections involved loss of control, or mid-air collision. Apart from ejections, there were 14 fatal accidents; one engine-related, five ground/water impact (all at night), three suspected incapacitation, two low-level aerobatics, two mid-air collisions and one collision on landing. A full list of Mirage major accidents is on page 141 of The RAAF Mirage Story at https://www.radschool.org.au/Books/books.htm

Attached is a summary of RAAF Mirage major accidents prepared by Squadron Leader John Herbertson at DAFS for The RAAF Mirage Story. Whilst the attrition rate of the RAAF Mirage at 11.96 losses per 100,000 flying hours would seem unacceptable today, it was typical of the single-engined fighter aircraft of that era, and only slightly above the RAAF forecast of 11.0. See included Table on Statistics

Below the statistics table is my own account of the loss of A3-52 one dark night in 1967 over the Barrington Tops.

MAJOR ACCIDENTS (CAT 4 and 5)

MIRAGE IIIO, IIID

BREAKDOWN BY CATEGORY

CATEGORY	TYPE	AIRCRAFT LOST	REMARKS
Material	Engine/fire	16	11 ejections, 1 fatal
	undercarriage	6	8 ejections
	type failure	2	Both on take-off
		24	51% of total losses
Human Factors	Ground/water impact	5	5 fatal, all at night
	sus. incapacitation	3	3 fatal
	low level aero prac.	3	2 fatal, 1 ejection
	mid-air collision	3	2 fatal, 1 ejection
	collision on ldg.	2	1 fatal
	wheels up landing	1	
	overstress	1	
	spin	1	1 ejection
	fragmentation	1	1 ejection
		20	42% of total losses
Operational Hazard	ricochet	1	1 ejection
	birdstrike	2	1 ejection
		3	7% of total losses
	TOTAL	47	25 ejections, 14 fatalities
			DAFS — AUG 88

The Loss of Mirage A3-52

It was an ill-fated flight that nearly didn't happen for me. I was to lead a stream of aircraft at five-minute intervals on a night navex from Williamtown to Orange and Tamworth, returning to Willy over the Barrington Tops high country north of Newcastle. I was in A3-52, Jake Newham's own mount, the Squadron flagship. She was just back from the mod programme at Avalon which incorporated ground map radar, doppler, radio altimeter, flying aids etc, just 50 hours on the clock. As a 22-year old Pilot Officer, I was impressed with my charge, and looking forward to the flight.

On start up, the alternator would not reset. We varied the RPM and the troops were busy underneath, but the ALT light would not go out. I was about to shut down when a Corporal electrician, Lindsay Ball I think, indicated he would go up onto the fuselage. Bob Walsh appeared from the crew room looking worried – what was the hold up! The equipment bay opened and bingo, the light went out; I was on my way.

It was a cold, dark September night in 1967. There was a strong westerly blowing at 36,000ft on the final leg and the Mirage was revelling in the conditions. My doppler was giving me 600kts ground speed, the aids were flying the plane and I could see the base on the radar - the French Lady was bunging it on. Suddenly, without a sound, the engine quit, zero RPM, and the fail panel lit up like a Christmas tree, I could hardly believe my eyes!

I set up in a 300kt glide and put out a Mayday call to Willy Approach. At 25,000ft I tried a relight, which achieved nothing except dimming the cockpit lights. I started to consider my options, which were very few, when suddenly both fire-warning lights came on - later revealed to be a symptom of a flattening battery. Expecting the plane was about explode, my inevitable decision was made for me.

I pulled the face blind handle and the seat shot up the rails, tumbling backwards and stabilising with the drogue. There were several minutes of free fall, then to my great relief, the main parachute opened automatically at about 10,000ft. For nine minutes I swayed quietly beneath the canopy. I could see nothing below in the darkness, but I could feel the air getting warmer and I could smell the earth coming up, it smelled like…cow manure.

I hit the ground like a bag of spuds, falling backwards and banging my head. There was no wind so I lay there looking up at the stars, my heart pounding – I think it's all over. I was very fortunate to have come down onto a cow paddock and not into high trees. I made my way down a roadway and was soon overflown by a Neptune, scrambled from the circuit at Richmond. The 'Neppy' orbited over my beacon and I fired a flare to acknowledge.

I came to a farmhouse and knocked on the door. An old man appeared, 'Come in', he said, 'I'll put the kettle on'. He had been contacted by the local police to be on the lookout for a downed pilot, otherwise he may have gone for the shotgun; dressed in G suit and Mae West, and with a wound on my neck from the face blind, I must have looked…alien. After what seemed to be an eternity to me, a Police land rover arrived and I was taken to the Gloucester show grounds where a RAAF chopper waited. The whole town, and the media, was out for the occasion.

As the Huey thumped its way back to base through the darkness, the drama of the event started to sink in to me. I was very remorseful that I was not able to bring that fine machine back to its home. I was angry that some component had let us down, and I wanted to know what had gone wrong. But I was grateful to be alive, and most thankful to Mr Martin Baker and the troops who serviced his equipment - the seat worked perfectly and certainly saved my life.

We searched the area for weeks with a fleet of choppers, but found nothing. The old man in the farmhouse had heard that there was a reward for finding the wreckage. He thought he heard the thump of the aircraft hitting the ground, and being an experienced bushman, he would go out on a different radial each weekend searching over a period of twelve months. One day he walked into a crater and kicked a bit of tin with Mirage written on it. Unfortunately, there was no reward, so we paid him a visit and presented some squadron merchandise.

Excavators were sent to the site, and started digging. They got to the engine nozzles, the rudder, the mainplane and eventually the bit they wanted at the front of the engine. Components were analysed at CAC in Melbourne and revealed that the engine gearbox bearing had seized from lack of lubrication thus shearing the Drive Bevel Gear causing engine flameout. Further inspection discovered fragments of rubber and wood blocking the oil line. It is possible that these foreign objects were part of a bung used to keep oil lines clean during the aircraft's manufacture.
The RAAF subsequently modified the Atar engine to incorporate a filter in the oil feed pipe and added an extra oil jet to the gearbox. No further such failures occurred in RAAF service.

Reflections of My First Air Training Corps (ATC) Camp (Jan 1956)

From Tony Moy – SQNLDR (Ret'd)

Having recently been solicited for articles for the next SITREP Publication, I thought that an article might wash on recollections of my first ever camp as a very junior member of Tasmanian SQN Air Training Corps in Hobart. For simplicity and context, I have used the long since replaced abbreviation for this organisation but recognise the eventual change to AIRTC and more recently AAFC.

My time as an ATC Cadet stretched from March 1955 to Jun 1959 and it was, I believe, late 1955 when nominations were called for attendance at a General Service Training Camp the following January. Normally, the annual camps were generally in the May school holiday period, and the Promotion Course Training Camps in the January. At that time, the availability of state camp facilities was in the main governed through the use of Army resources, and specifically, the General Training Camp Facility at Fort Direction (South Arm) on the Tasman Peninsula.

So, the opportunity to attend a GST Camp in January was somewhat unique and, it was on invitation for a party of 24 Tasmanian cadets to participate and integrate into a camp being held by Victorian Squadron ATC at RAAF Point Cook. Arrangements were for Service air transport to and from Hobart (via Launceston for North Tas representatives) to Melbourne Fishermans Bend airfield, with road transport to Point Cook. At that time, Fishermans Bend was the home of the Government Aircraft Factories (GAF) and the Commonwealth Aircraft Corporation (CAC), both organisations with extensive on-site factory facilities.

Applicants' names were put on a list with an accompanying pro-forma Parental Consent Form to attend and use of Service aircraft. My name came out of the barrel and we were given a detailed listing of required kit. The initial kitting of Tasmanian ATC cadets at that time was rather minimal: blue battledress uniforms, blue-grey shirts plus collars, forage cap garrison, great coat, boots, socks and a kit bag - certainly no summer uniform.

On the appointed day, we paraded at the ATC Headquarters (then in the Army Anglesea Barracks) as required, (and I well remember travelling by tram from home to central Hobart then walking to the Barracks some 10-15 minutes away), in uniform and with kit bag. (our household did not run to a car in those days) Eventually we were trucked to Hobart Airport (then the original facility at Cambridge), loaded onto an RAAF Dakota (first time for me) and departed for Launceston. Here we picked up the balance of the contingent with selected cadets from Launceston and Burnie ATC Flights. Then the long haul across Bass Strait to Fishermans Bend. During the flight, which was a first for many, we were given a cockpit visit and the crew seemed very happy to explain the workings and put up with us on what to them must have been termed a 'milk run'.

At Fishermans Bend we had the inevitable loading on to vehicles for the trip to Point Cook. It was here that for one of the Instructional Staff meeting us that the 'penny dropped'; it was middle of Melbourne summer, boiling hot, and all our group only had winter weight uniforms to wear, not even overalls, let alone summer 'drabs'. Next morning, we were bussed into ATC Headquarters in Ireland St, West Melbourne to the Equipment Store, issued with overalls and one set of summer drab uniforms which was deemed sufficient for our short stay and the very limited need to wear other than overalls during the camp. Both issues were to be returned at the end of the camp (presumably to be laundered and available for reissue).

For our time at Point Cook, we were integrated with the Victorian cadets, accommodated in tents pitched on a large sporting and recreation area inside the main gates on the right side and opposite the airfield. (in later times this area became a major expansion to RAAF College.) Alongside this area and closer to the main domestic area, was a cluster of semi-permanent accommodation huts which housed what I believe was the last of the RAAF National Service

intake. We cadets were segregated away from that area, but were certainly aware of their presence at night with the noise. One group of Nasho's, apparently determined to be noticed, towards their departure became more well known than prudent, after one night placing two toilet bowls in the middle of the main parade ground outside Formation Headquarters. This prank apparently did not go down well.

The other nightly distraction was that the hut and tent lines were on the approach path to the main runway. There was significant early evening night-flying noise with aircraft overhead. At this time, the new Winjeel trainers were coming on line, replacing the Wirraway, and 1FTS was taking full advantage of the new aircraft. Eventually we became immune to the noise.

RAAF Winjeel Trainer

Sometimes we were segregated into activities which did not include elements of the host cadets; occasionally this caused some passing comment, but generally we all seemed to get along fine. It was also apparent that our standard of kitting was different in condition and lower than that of the Victorians, which also drew passing comments. Most of the Tassie cadets were of a similar age and seniority to me, ie around 14-15 years, whereas my tent companions were somewhat older and had more exposure to RAAF activities purely because of their mainland location.

During our days there was the inevitable drill and 'square bashing', and time in classroom instruction. The 'extras' for us gave a better appreciation of base activities; fire section playing with hoses, rifle range tuition using Morris Tube .22 cal rifles (re-barrelled .303 Lee Enfield Service rifles), AVMED section, 1FTS maintenance hangar, an extended Port Phillip Bay 'cruise' on the Marine Section Crash boat and visits to the Catering and Barracks sections. Also, we had a full day visit to the GAF/CAC installations seen on arrival. Perhaps the outstanding activity was we (Tassies) had a 30-40 minute flying tuition in a Winjeel, which was great. I happened to have an instructor who recognised my name; he'd had an acquaintance at East Sale on his last posting, who was in fact my brother, a Naval Aviator on duty there. Small world!

One somewhat funny experience was that we were all made aware of the Base Swimming Pool, which was in reality a netted area inside an arm of the Port Phillip Bay Jetty. Marine Section was located on the opposite side of the jetty. On one of the organised activities down 'Burma Road' to the working harbour side of the Base, several of us decided to have a look at this swimming enclosure. Well, it didn't take long to realise that swimming was definitely not on - inside the enclosure and clearly visible was a distinctly large, grey fin. Obviously, a hole in the enclosure netting had allowed a shark to get inside which was then unable to get out. The Marine Section staff were aware of the situation and put up a sign warning off intending bathers. I'm not sure how they eventually got rid of the beast, although I suspect maybe it suffered some 'lead poisoning'.

One aspect of the meal times that we came to accept, was that we moved in squads to the OR's Mess for breakfast and lunch dressed in overalls. However, for evening meal it was the custom to

change into uniform, usually our sole issue of drabs, which towards the end of the visit were looking decidedly second hand. But apart from our 'blues' that was all we Tassies had. Generally, our hosts had more than one set and so looked somewhat better – and they knew it!

Our time at Point Cook eventually came to an end with a full parade and march past of all the cadets, with the salute taken by the Base Commander. After farewells to our hosts, on the following day we Tassies packed up, returned our gear to Base staff, and were transported back to Fishermans Bend Airfield for the flight back to Hobart (via Launceston) in the Dakota. One somewhat disturbing aspect for us was that we were all issued with life preservers, and the life rafts were positioned down the centre aisle of the aircraft. The Load Master explained that this was a crew training flight at low level across to Launceston and all the necessary precautions had to be taken in the event of a ditching! The precautions proved unnecessary and we arrived safely without a problem. As a very junior ATC cadet this camp had been a great and very memorable experience.

The Buff's Folding Tail

An important but rarely noted feature of all B-52 Stratofortress strategic bombers

From The Aviation Geek Club, By Dario Leone

The B-52 Stratofortress is a long-range, heavy bomber that can perform a variety of missions. The bomber is capable of flying at high subsonic speeds at altitudes of up to 50,000 feet (15,166.6 metres). It can carry nuclear or precision guided conventional ordnance with worldwide precision navigation capability.

B-52s are equipped with advanced targeting pods. Targeting pods provide improved long-range target detection, identification and continuous stabilized surveillance for all missions, including close air support of ground forces. The advanced targeting and image processing technology significantly increases the combat effectiveness of the B-52 during day, night and less than ideal weather conditions when attacking ground targets with a variety of standoff weapons (e.g., laser-guided bombs, conventional bombs and GPS-guided weapons).

Photo credit: Unknown via Reddit and Staff Sgt. Melissa B. White / U.S. Air Force

As the interesting pictures in this post show, another important but rarely noted feature of all B-52 Stratofortress strategic bombers is the folding vertical fin.

As explained by Scott Lowther in his book Boeing B-47 Stratojet & B-52 Stratofortress Origins and Evolution, the fin was, at least until the G-model, a vast structure; too tall by far to allow the B-52 to fit within standard hangars. So, it could fold over 90-degrees, greatly reducing the effective height of the aircraft. Unlike naval aircraft with wings that fold to fit in the limited space on board aircraft carriers, the fielding fin is not a self-contained system — an external crane is needed to lay it over and raise it back up again.

Photo credit: Unknown via Reddit and Staff Sgt. Melissa B. White / U.S. Air Force

However, the B-52's fin must also be folded in order to change the Buff's tail or rudder (one of the three primary components along with a spoiler and an elevator needed by an aircraft to roll, pitch and yaw). A rudder change is no simple task and it takes a hand full of airmen several hours to complete.

'First we fold the fin to the right side of the B-52, then we disconnect the seal, remove the bolts and then remove the rudder with a crane', said Senior Airman Jacob Dunn, 2 MXS R&R, in the article '*Fold, Fix and Fly*', by Senior Airman Micaiah Anthony, 2nd Bomb Wing Public Affairs. 'We take a giant jack screw and attach it to the aircraft's fuselage and vertical stabilizer', he said. 'Once that is on and all the components are disconnected, you can start hand cranking it down which takes four airmen approximately two to four hours.' Once the fin is completely folded, it is locked in place for safety so the airmen can work on it.

'Removing the rudder takes five to six hours depending on whether or not you have to install a new one or if sheet metal has to work on it', said Raymond. 'After that, it takes another five to six hours to put it back on.' With the rudder installed, airmen inspect the rudder to ensure everything is up to standards.
With the new rudder installed and inspected, phase airmen spend the next eight hours raising the fin of the B-52. Once fully vertical, the aircraft can return to the flightline.

Humble Servant Retires after 50 years

Reprinted with permission from CONTACT magazine

Warrant Officer Ian 'Blue' Macgregor joined the RAAF on 8 January 1974 as a 15-year-old radio apprentice from Western Australia – and retires this month after serving the RAAF for 50 years.

Ian 'Blue' Macgregor on enlistment day and on the flight deck.

Completing his apprenticeship at RAAF Base Laverton, Blue Macgregor was posted to RAAF Base Richmond as a radio technician in 36 Squadron. In 1982, he was selected to be retrained as a flight engineer on the C-130H aircraft and later, on 33 SQN's Boeing 707.

During his career, Blue was deployed on several missions to Kuwait as part of Operation SOUTHERN WATCH and to Afghanistan on Operation SLIPPER. In addition, he had the honour of transporting numerous VIPs including Prime Ministers Bob Hawke, Paul Keating and John Howard; religious leaders such as Pope John Paul II (including a short stint driving his popemobile); and members of the royal family including Her Majesty, the late Queen Elizabeth II.

Following the tragic crash of a RAAF Boeing 707 in 1991, resulting in the loss of the aircraft and all five crew members, Blue Macgregor began working on re-writing safety procedures and risk assessments for RAAF aircraft operations that should be trained in a simulator environment rather than in real-world conditions. For this work, WOFF Macgregor was awarded the Order of Australia for meritorious service to the RAAF as 33 SQN Flight Engineer Leader and Resident Flight Engineer of the B-707 Simulator Project Office. In 1998 Blue was also awarded the Pathfinders Award for Excellence within the RAAF Air Mobility Group.

Ian 'Blue' Macgregor congratulated by NSW Governor Marie Bashir on being awarded an Order of Australia.

Following his retirement from full-time service in 2006, WOFF Macgregor continued to serve in the Reserves while working in a public service role as Simulator Integrated Logistics Manager for 285 SQN. More recently, he has played a vital role in helping develop the capabilities of the C-130J simulator in conjunction with our allied operators of that aircraft.

These days, the young red-haired kid from WA is now the happy husband of 30 years to wife Fiona, father to Alison, Stephen, Daniel and Duncan and grandfather to six. WOFF Macgregor has seen a lot change in 46 years living in the Hawkesbury, including the many floods, bushfires and urban sprawl heading westward.

Following his 65th birthday in October last year, WOFF Macgregor's time in the RAAF will finally end on 31 January 2024 after 50 years service. In retirement, Blue Macgregor looks forward to continuing to serve his community by volunteering at the Hawkesbury Community Kitchen as Treasurer of the Jeremiah Project and his local church at Vineyard.

Booming Sabre

From https://www.thisdayinaviation.com/tag/avon-sabre By Bryan Swopes

Commonwealth Aircraft Corporation CA-26 Sabre A94-101 (Royal Australian Air Force)

It was the 14th August 1953 near Avalon airfield, Geelong, Victoria, when Flight Lieutenant William H. Scott, Royal Australian Air Force, the 28-year-old Chief Test Pilot of the

Government Aircraft Factories, put the new Commonwealth Aircraft Corporation Pty Ltd prototype into a shallow dive from 25,000 feet (7,620 metres) over Port Phillip Bay. This was the new airplane's sixth test flight. Scott passed 670 miles per hour (1,078 kilometres per hour) and broke the sound barrier. A triple sonic boom was heard throughout the Melbourne area.

The aircraft was the CA-26 Sabre, A94-101. The Australian-built Sabre had made its first flight on 1st August, also with FLTLT Scott in the cockpit. After about a week there were reports of sonic booms in the area around Melbourne.

Commonwealth Aircraft Corporation CA-26 Sabre A94-101 (Royal Australian Air Force)

Based on the highly successful North American Aviation F-86F Sabre, the C.A.C. variant used a license-built Rolls-Royce Avon RA.7 turbojet with 7,350 pounds of thrust. The Sabre's fuselage had to be extensively redesigned to allow installation of the new engine. Although it was about the same size as the J47 it replaced, the Avon needed a much larger intake duct. And because it weighed less than the J47, it had to be moved aft to maintain the Sabre's centre of gravity. Only about 40% of the original structure remained.

Other changes were replacing the fighter's basic armament of six .50-caliber Browning machine guns with two 30 mm ADEN revolver cannon. In testing, it was found that the muzzle blast of the ADEN cannons could cause the engine to flame out. Maxim shock wave baffles were installed to eliminate the problem.

Commonwealth Aircraft Corporation CA-26 Sabre A94-901. (Royal Australian Air Force)

The aircraft, often called the 'Avon Sabre', was put into production as the CA-27 Sabre Mk 30. Twenty-two aircraft were built in the version. With the introduction of the Mark 31, the original

Sabres were upgraded to the new standard. Sixty-nine Sabre Mk 32 fighters were built with the Avon 25 engine and increased fuel capacity. The CA-27 was in service with the Royal Australian Service from 1954 until 1971. Several were transferred to Malaysia and Indonesia and operated by those countries until 1982.

A94-901 as it appeared when assigned to 76 Squadron 'Black Panthers', 1961–1965. (HARS Museum) © 2018, Bryan R. Swopes

The prototype CA-26 Sabre, A94-901, flew with several RAAF squadrons, including the 76 Squadron 'Black Panthers' Aerobatic Team, 1961–1965. It was withdrawn from service in 1966. The Sabre was restored by Hawker de Havilland at Bankstown Airport, before being sent to the Historical Aircraft Restoration Society (HARS) Museum at Illawarra Regional Airport, south of Sydney, New South Wales, Australia. The airplane is again in the livery of the 'Black Panthers'.

We Speak the same Language…don't we?

From Lorraine Folkes

During the second world war, my mother lived in Temora while she and her sisters were all teenagers. Whenever a train pulled into the railway station, they would race up to welcome it, knowing it would be full of American military, who would open the windows and throw out lollies and chocolates to them.

Wartime security meant that station names had to be covered, so the passengers didn't know where they were. The Americans would shout out of the windows 'Where are we, where are we?' My mother and her sisters would yell 'Temora, Temora'. The Americans would yell back 'We don't want to know where we'll be Temora, we want to know where we are today!'

The McDonnell Douglas F/A-18 Hornet

From Phil Frawley

A RAAF F/A-18A Hornet aircraft air to air refuels from a RAAF KC-30A tanker aircraft during a mission in the Middle East Region on Operation OKRA. During the mission the recently arrived F/A-18 Hornets flew alongside of F/A-18F Super Hornets that would soon return to Australia.

The RAAF started taking delivery of the Hornet in 1984 to replace the Mirage *(Ed:The Australian Hornets began to roll off the production lines in 1984. The first two aircraft (serial numbers A21-101 and A21-102) were entirely built at McDonnell Douglas's factory in St. Louis, and were handed over to the RAAF on 29 October 1984. These aircraft remained in the United States until May 1985 for training and trials purposes.)*.

The Mirage was a second generation jet fighter and the Hornet is a fourth generation jet fighter. Basically, fighter generations are a measure of the technology incorporated in the design of the aircraft. So the step up to the Hornet from the Mirage was a quantum leap in capability for our fighter pilots and the development of tactics to fully utilise the aircraft's capability was a challenge. As an example, the radar on the Mirage could pick up another fighter sized aircraft at around ten miles whereas the Hornet range for detection was forty miles, so tactics had to be formulated accordingly to deal with this massive increase in capability.

Some facts then about this amazing machine, in the clean configuration (no external stores other than missiles) the aircraft weighed 34,000 pounds, the two F404 engines produced 32,000 pounds of thrust so after burning 2,000 pounds of fuel the power to weight ratio became 1:1 and improved as fuel was burned down. This means that from sea level you could pull the jet into the pure vertical and hold your speed up to around 18,000 feet before it started to slow down. The jet had virtually no limits you could pull the stick back as hard as you like and it would only let you have the 7.5 G limit, the engines as well could be pulled all the way back to idle and then smashed straight back to full afterburner and the engine's computers would deal with the demand.

Most jets of the same era; F-15 and F-16, had an angle of attack limit of 25 degrees whereas the Hornet virtually had no angle of attack limit. How is this possible? Well, it is all to do with the computers on board; there are two mission computers, an air data computer, a stores management computer, two flight controls computers, and the engines have their own computer as well. So, when you apply a control input, the two flight control computers, the two mission computers and the air data computer conduct a committee meeting to decide how best to give you what you have asked for. First the air data computer supplies the mission computers with information of where the aircraft is in the atmosphere ie. altitude, air temperature and current airspeed, the mission computers compare notes to decide what limits apply for the present conditions and advise the flight control computers of how much flight control movement they are allowed to apply in order to comply with the pilot's request. The flight control computers then decide which surfaces they will move to satisfy the request. Simple right? And of course, this occurs thousands of times per second. Oh yes, the flight controls do not necessarily act in the same manner as conventional controls; for example, at take-off the rudders are toed inwards and act as supplementary elevators, the main flaps can move up as well as down, albeit by a small amount. To add to the intrigue, the stick is not connected to the flight controls unless a massive failure occurs and the controls revert to 'MECH ON' which is a very bad state of affairs if it comes to that.

Prior to taxiing out, the pilot will run a flight controls built in test (BIT), where the flight control computers test the entire system exercising all the surfaces to the maximum extent and all the while the control stick doesn't move, quite disconcerting the first few times you sit through it. The aircraft also continues to do its own testing of all systems continuously. If it finds some problem the aircraft will decide if you need to know about it, or wait until it is shut-down and then it will let the ground crew know about it through downloads of maintenance codes.

Then there are the engines, if they have a problem that they can solve themselves they'll just do it, even if an engine flames out, it will relight itself although it will tell you that it has the problem through 'Bitching Betty'. Bitching Betty is the integral part of the warning system and is accompanied by warning lights on a warning panel in the cockpit. Bitching Betty is a female voice that tells you of a serious problem and she has different tone levels according to the seriousness of the emergency. Some examples are 'Flight Controls, Flight Controls', not so serious, so she is reasonably calm, but 'Engine Fire Left, Engine Fire Left' is reported at a heightened level of excitement and certainly focuses your attention.

With all that technology working for you the jet was a pleasure to fly and allowed you to concentrate on your tactical plan. Coming to terms with the capability at your disposal was a steep learning curve; the missiles were now able to attack from all aspects so you didn't need to get on the tail of your opponent you just needed to get a good radar lock and the computers would let you know when you were in range to fire. The problem, of course, was that our

potential opponents in the Eastern Blok were also developing similar technologies so development of tactics became, and is still, a continuing evolution. This naturally relies on our knowledge of what the opposition is doing, so our intelligence community is an integral part of how our air power doctrine is formulated.

On the few occasions that we get to have a bit of a play with the jet it is truly amazing. This mostly happens when you are programmed to do a passenger flight for someone who has 'won the lottery' and is chosen to fly in the two-seat trainer. A typical profile is a full afterburner take off and climb to 35,000 feet, which happens very quickly, then accelerate to supersonic speed usually to around Mach 1.4 or thereabouts. I would then descend to about 15,000 feet and slow the aircraft right down and increase the angle of attack to somewhere around 50 degrees so the passenger could experience the clouds (called ectoplasm) forming off the wings and leading edge extensions. A few aerobatics followed with an excursion to 7.5 G if the passenger was up for it. After that exercise, a descent to low level and slowing the jet to 200 knots, I would then push the throttles to full afterburner and accelerate to 600 knots subjecting the passenger to 3 G longitudinal force - and that is very impressive let me assure you!

I have two stories to add to this blog, the first was during a basic fighter manoeuvre mission (BFM) where I was to play the part of the defensive fighter while a junior pilot practised his offensive manoeuvring. I spent this one setup looking over my shoulder in a right hand turn at 7.5 G with my head between the canopy and the headbox of the ejection seat. When the offensive pilot had satisfied the aims of the exercise the set was terminated and it was then that I relaxed the G and found my head was stuck between the canopy and the seat and I couldn't move it. So I'm looking backwards trying to fly the aircraft and wondering how I was going to extricate myself from this predicament. I tried to pull myself out of the helmet but I was unable to do it and then it occurred to me that I got myself in this position while pulling 7.5 G so it was probably safe to assume that the flexing of the jet was how it happened. I decided to try and pull 7.5 G and see if this would let me free myself, all the while not being entirely sure of what the jet was doing. So I yanked back on the stick, not knowing if I had enough speed to get the required G, and thankfully at around 7 G, I was able to free myself. All this time my wingman was wondering what the hell I was doing with the series of erratic manoeuvres that my jet was performing.

The second story is one of my favourites and has entered into fighter folklore in the RAAF. 77 SQN was returning from a major exercise in the Philippines known as Cope Thunder and we had had an overnight in Darwin. The next day I was the flight lead of a four aircraft formation and the last four ship of three that were heading home to Williamtown. We had not long departed the air-to-air refuelling tanker and had established ourselves at 35,000 feet in the cruise. I had engaged the autopilot and sat back to relax and enjoy the flight noticing that we were emitting contrails from all four aircraft, now established in wall formation, which is all four aircraft in line abreast one to two miles apart. As I looked to my left, I noticed the number three aircraft, piloted by one FLTLT Steve Wild, a great mate, go into a dive and then into a climb whereupon his wingman did a similar manoeuvre and I assumed that they were just playing around in the contrails.

I later learnt that Steve had been out in Darwin the night before, had gone to an Indian restaurant for a curry, and the aftermath of that outing was now coming back to him with a vengeance. What had happened is that he was suddenly overcome with a dire need to go to the toilet. To do this Steve had to make the ejection seat safe, take off all of his life support equipment (survival jacket and G suit), remove his flying suit, stuff all of this equipment into the rudder tunnels, empty his flight publications bag of all his maps etc because this was to be the receptacle for his impending deposits and squat on the seat to complete his ablutions. During the use of the flight publications bag Steve bumped the autopilot off and the aircraft entered a dive.

Steve had to recover the aircraft from the dive even though he couldn't see the head up display properly, and re-select the autopilot. His wingman, thinking something was amiss, decided to fly over and take a look and see if all was OK. Upon seeing a naked man squatting on the seat of the aircraft he decided that he wanted nothing to do with this situation and resumed his position in the formation. Steve managed to get everything back under control again, but unfortunately suffered another episode sometime later and had to repeat the whole process again; he even bumped the autopilot out again and completed the same manoeuvre to regain control. This time however, the wingman was disinclined to witness whatever was going on in the number three aircraft and remained at his station.

I flew the Hornet for five years, managing to get more than 800 hours on it and it was a fantastic experience. I can only imagine what the next RAAF fighter the F-35 Lightning II would be like because it will be another quantum leap in capability for the RAAF and Australia.

First Intakes of Apprentices Marched In

2 February 1948

This material is compiled from various sources including the History and Heritage Branch–Air Force, the RAAF Museum, the Australian War Memorial, ADF Serials and www.ozatwar.com. The History and Heritage Branch–Air Force is not responsible for pre-1921 items. Whilst every effort is made to confirm the accuracy of the entries, any discrepancies are solely the responsibility of the originator. As I am not a member of History and Heritage Branch-Air Force, all Air Force history or heritage queries should be directed, in the first instance, to airforce.history@defence.gov.au

No 17 Radio Apprentices Course, 1963

The first group of 53 youths aged 15–17 who had been selected for engineering training under the RAAF's new apprenticeship scheme entered the Ground Training School at Forest Hill (Allonville) outside Wagga Wagga, NSW, on this day. Five days later, a group of 16 youths

similarly joined a separate Radio Apprentice School (RAS) established at the former wartime RAAF establishment at 'Frognall', in the Melbourne suburb of Canterbury. Recruitment of a second intake of apprentices began almost immediately, leading to another 84 joining at Wagga and 18 at RAS by the end of July.

When the apprenticeship scheme ended 45 years later, a total of 6151 tradesmen and technical specialists had graduated into the RAAF.

First RAAF C-130 trip to Antarctica

From Stuart Dalgleish

The high point of my final RAAF posting was setting up RAAF flights to the Antarctic. Our Kiwi friends had been flying their C-130s from Christchurch to McMurdo Sound each summer for several years as part of Operation Deep Freeze, and the Australian Government decided to add 36 SQN to the 1978 airlift. I took a five-man crew to fly with the Kiwis in Nov/Dec 1977 to learn about the operation, then 36 SQN joined in as planned the following year.

During the previous trip with the Kiwis, I had an interesting discussion with an American Navy ski-equipped C-130. He described how they conducted operations in bad conditions, which required landing blind on the ice. They would fly overhead the TACAN (radio navigation aid), then descend at a low rate (300 feet per minute) in a known clear area, until the aircraft landed on the ice. After landing, the aircraft was slowed with reverse-thrust, then turned and taxied towards the TACAN beacon, stopping when half a mile from the TACAN. The engines were left running as the ground party arrived and unloaded the aircraft. For departure, the aircraft was turned 180 degrees, full power applied, and the compass used to maintain direction during the take-off run.

As we planned to offer maximum freight load, rather than carry sufficient fuel for a return to Christchurch, we planned to use a PSR (Point of Safe Return) of about two hours from McMurdo, on the basis that weather updates would be available every half hour to inform a decision to continue or turn back. This meant we really should have a Plan B in case the weather deteriorated after PSR.

Back at Richmond, I worked on this problem and using the information gleaned from the US Navy pilot, I discovered that flying a slightly faster approach, descending at 300 feet/minute to the runway with 50% flap in lieu of the usual 100% full flap, the aircraft settled nicely in ground effect onto the runaway with no flare required. I then trained the crews in this procedure at Richmond.

The McMurdo ice runway was 10,000 feet long by 300ft wide and the edges were marked with empty black steel fuel drums. These drums painted very well on our excellent aircraft radar, so for Plan B, the Navigator would direct the approach, with instructions to maintain centreline and glideslope. So, if necessary, we could fly the aircraft down the approach path and land blind.

The first RAAF flight onto the ice runway at McMurdo occurred on 01 Dec 1978, and I had the honour of being in command. Members of the crew were Squadron Leader Stuart Dalgleish Captain, Pilot Officer Ian Morris Co-Pilot, Flying Officer Leigh Bearman Navigator, Sergeant Bill DeBoer Flight Engineer, and Warrant Officer Bob Heffernan Loadmaster. In fact, it was an enormously challenging flight, as the forecast weather at McMurdo was quite marginal. After doing battle with poor HF communications, I managed to speak to the weatherman at McMurdo via a patch call through South Pole station. He confirmed the weather was not great but would be suitable for a visual approach. We were almost at PSR by this time, so I asked each of the crew if

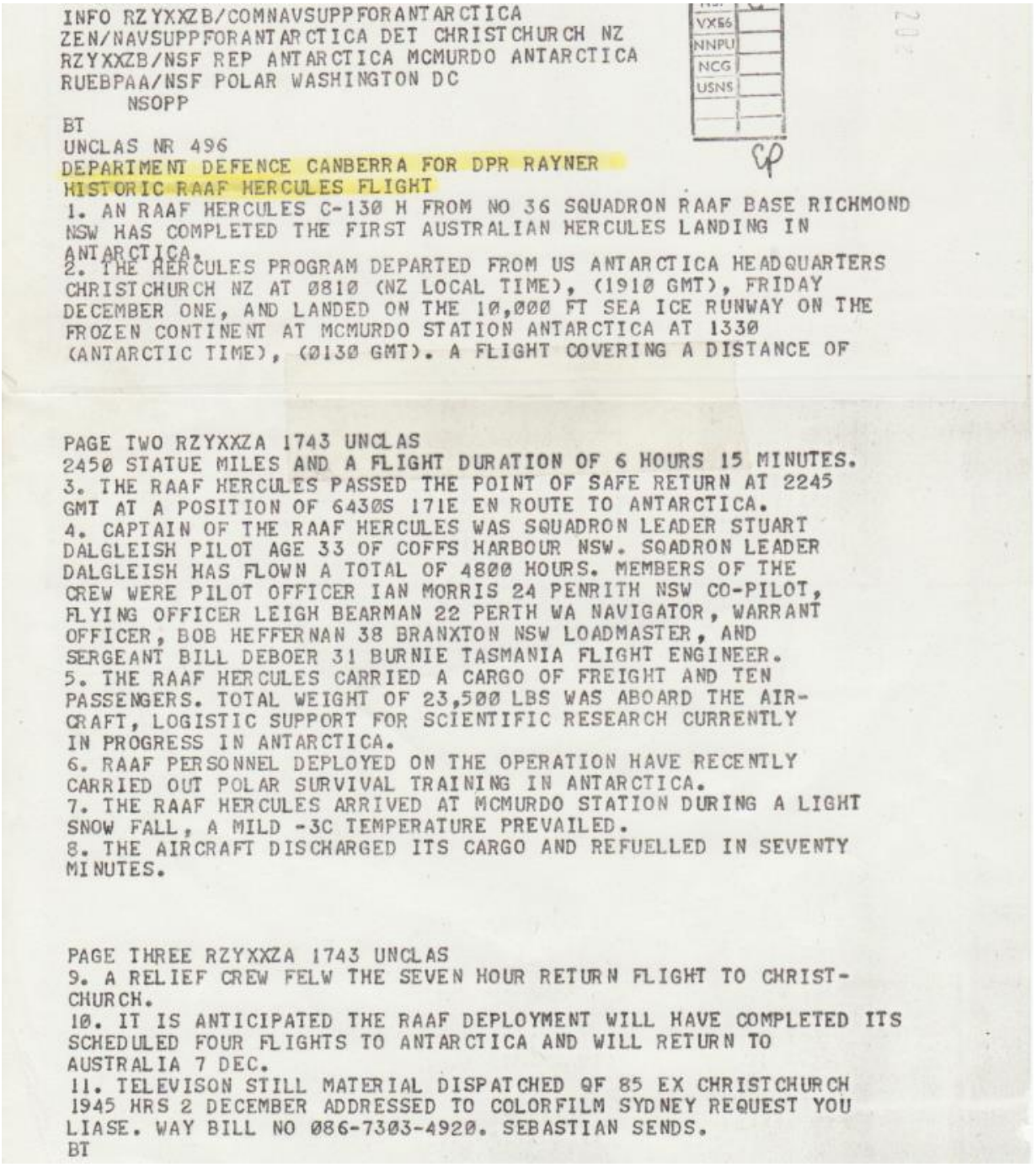
they were happy to proceed, as there was obviously a heightened risk of poor weather on arrival. They all indicated willingness to proceed so I decided to continue.

Our point of safe return (PSR) was now 2:45 hours from McMurdo, so we were committed to continue as we carried insufficient fuel to return to Christchurch. Shortly after the decision to continue, the scheduled half hour weather report for McMurdo had deteriorated to Zero Zero (cloud base and visibility), which made (normal) landing impossible. The following two weather reports were also Zero Zero, so the level of anxiety of the crew was growing (I was having a nervous pee every 20 minutes!). It became obvious that we would have to adopt Plan B for the approach and landing and the crew were briefed accordingly.

Much to our relief, the weatherman got it right, the cloud base lifted to 400 ft and we arrived during a light snow fall; however, we were the last aircraft in for three days due to poor weather! My decision to continue was derided by the Kiwis as too risky. They were following us by about an hour and decided to turn back to Christchurch due to weather. Probably a good decision, but unlike them, we had a Plan B with a much superior radar, and we were very keen to be the first RAAF crew to land a C-130 on the ice.

First RAAF crew to land on Antarctica

For the second flight to McMurdo, to offer maximum payload and allow the aircraft to be loaded early, I sought and received approval to utilize the 'overload' capacity of 175,000 lbs., an increase of 20,000 lbs above the normal max weight. This gave the despatchers a known load and gave us the ability to increase fuel load if required by adverse forecast wind. We duly departed with an All Up Weight (AUW) of 175,000 lbs and enjoyed the flight to McMurdo in good weather and saw the Antarctic at its best. Normal adjectives fail to convey the truly remarkable scenery. On arrival the crew were in high spirits, and I asked my Co-pilot, 'Limpy', if he would like to fly a couple of circuits and landings as this was probably a once in a career opportunity. He grabbed the opportunity with gusto! The Americans thought we were nuts!



INFO RZYXXZB/COMNAVSUPPFORANTARCTICA
ZEN/NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ
RZYXXZB/NSF REP ANTARCTICA MCMURDO ANTARCTICA
RUEBPAA/NSF POLAR WASHINGTON DC
NSOPP
BT
UNCLAS NR 496
DEPARTMENT DEFENCE CANBERRA FOR DPR RAYNER
HISTORIC RAAF HERCULES FLIGHT
1. AN RAAF HERCULES C-130 H FROM NO 36 SQUADRON RAAF BASE RICHMOND NSW HAS COMPLETED THE FIRST AUSTRALIAN HERCULES LANDING IN ANTARCTICA.
2. THE HERCULES PROGRAM DEPARTED FROM US ANTARCTICA HEADQUARTERS CHRISTCHURCH NZ AT 0810 (NZ LOCAL TIME), (1910 GMT), FRIDAY DECEMBER ONE, AND LANDED ON THE 10,000 FT SEA ICE RUNWAY ON THE FROZEN CONTINENT AT MCMURDO STATION ANTARCTICA AT 1330 (ANTARCTIC TIME), (0130 GMT). A FLIGHT COVERING A DISTANCE OF

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2450 STATUE MILES AND A FLIGHT DURATION OF 6 HOURS 15 MINUTES.
3. THE RAAF HERCULES PASSED THE POINT OF SAFE RETURN AT 2245 GMT AT A POSITION OF 6430S 171E EN ROUTE TO ANTARCTICA.
4. CAPTAIN OF THE RAAF HERCULES WAS SQUADRON LEADER STUART DALGLEISH PILOT AGE 33 OF COFFS HARBOUR NSW. SQADRON LEADER DALGLEISH HAS FLOWN A TOTAL OF 4800 HOURS. MEMBERS OF THE CREW WERE PILOT OFFICER IAN MORRIS 24 PENRITH NSW CO-PILOT, FLYING OFFICER LEIGH BEARMAN 22 PERTH WA NAVIGATOR, WARRANT OFFICER, BOB HEFFERNAN 38 BRANXTON NSW LOADMASTER, AND SERGEANT BILL DEBOER 31 BURNIE TASMANIA FLIGHT ENGINEER.
5. THE RAAF HERCULES CARRIED A CARGO OF FREIGHT AND TEN PASSENGERS. TOTAL WEIGHT OF 23,500 LBS WAS ABOARD THE AIR-CRAFT, LOGISTIC SUPPORT FOR SCIENTIFIC RESEARCH CURRENTLY IN PROGRESS IN ANTARCTICA.
6. RAAF PERSONNEL DEPLOYED ON THE OPERATION HAVE RECENTLY CARRIED OUT POLAR SURVIVAL TRAINING IN ANTARCTICA.
7. THE RAAF HERCULES ARRIVED AT MCMURDO STATION DURING A LIGHT SNOW FALL, A MILD -3C TEMPERATURE PREVAILED.
8. THE AIRCRAFT DISCHARGED ITS CARGO AND REFUELLED IN SEVENTY MINUTES.

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9. A RELIEF CREW FELW THE SEVEN HOUR RETURN FLIGHT TO CHRIST-CHURCH.
10. IT IS ANTICIPATED THE RAAF DEPLOYMENT WILL HAVE COMPLETED ITS SCHEDULED FOUR FLIGHTS TO ANTARCTICA AND WILL RETURN TO AUSTRALIA 7 DEC.
11. TELEVISON STILL MATERIAL DISPATCHED QF 85 EX CHRISTCHURCH 1945 HRS 2 DECEMBER ADDRESSED TO COLORFILM SYDNEY REQUEST YOU LIASE. WAY BILL NO 086-7303-4920. SEBASTIAN SENDS.
BT

RAAF Message recording the achievement

Personalities

From Henry Whittaker

The lead student on my course was a bit of a 'Casanova'. This guy must have emitted some sort of pheromone that attracted skanky trollops. He came very close to getting his 'cards shuffled' when he got himself involved with a Physical Training Instructors (PTI) wife. The thing was, this particular PTI was built like a 600lb gorilla - and a very jealous one at that. Mind you, this bloke apparently was a bit of a hypocrite on the fidelity front himself. But that didn't stop him from wanting to rip the head off Casanova. So, for a little while the workplace was like a running soap opera whenever she turned up (she was also a WAAF). I quietly hoped one day

Casanova might show up for work after an intense 'workout' with the gorilla with his arms having been relocated and refitted to his arse.

Another bloke had an incredible memory. This guy could read a 12-digit part number once, then recall that number a month later. But for all his cognitive potential, he simply couldn't put it into his hands. As I look back on this chap, I suspect he was likely on the spectrum for Aspergers syndrome. When it came to relationships with women, he was hilarious - a virgin on enlistment he had been 'led astray' during Recruits Course in the 'nocturnal nefarious pursuits department', and it became a bit of an addiction for him. He seriously had no taste when it came to such activities. He made the saying, 'Go ugly early' a personal creed. One weekend he begged me to drive him into town to see his 'girlfriend'. I was reluctant, as I had a fair idea what this meant. I eventually relented and drove him in, but refused to park out the front of his 'girlfriend's' place. I told him I would wait for one minute before driving off; not a second longer, lest he would have to catch a cab or walk back to barracks. He readily agreed, but then fifty seconds later I heard shoes pounding on the pavement and he's jumped back in the car and says, 'Hurry!' 'What's up?' I ask him. 'Her husband answered the door!'

Another guy known as 'cane toad' was a funny guy. I first met him as a recruit whilst on the Green Phase at Murray Bridge. I ended up sharing a tent with this guy because nobody else would. This bloke permanently sweated and his face constantly looked greasy as a result. He was a little overweight and smoked. We were sitting in our tent and this guy was slumped on his litter chuffing a fag, and he just looked disgusting. I could not help myself from saying it, as it was the first image that came to mind; 'Dude, you look like a cane toad!' Well that was it, the name stuck from there on for the rest of his time in the RAAF. Like all nick-names he hated it at first, but he got used to it.

'Cane toad' and 'Youngy' were both on my Machinists course and these two geniuses decided they wanted to get an ear piercing to impress the local fillies, but they didn't want to pay for it. So, they thought it would be a good idea to take a hammer and centre punch from the tool board, put an ear on the steel marking out table, and belt a hole in each other's ear lobes. The idiots had not bothered giving a thought to at least sharpening the punch, so the process might be a little less painful and that maybe it would only take ONE blow of the hammer to accomplish the job. Not surprisingly, the result was a lot of pain, blood, swelling and nasty festering infections that nearly resulted in the loss of their ear lobes. For a while after that, they were aptly called 'Punch and Judy'.

During our mid-course Trade Trip, one of these clowns (I can't remember which) got very intoxicated and passed out in his room. Nothing unusual about that you may think, however he had left his door wide open and was in his birthday suit with his arse sticking up in the air. Well, if you are stupid enough to quite literally leave your arse swinging in the breeze, shenanigans will happen! For modesty's sake someone covered his arse with shaving foam, then we lifted him and his mattress and carried it down stairs and gently placed him on the grass outside. Luckily for him we were barracked in the old WAAF quarters, which had a privacy wall around them so the WAAFs could hang their washing and get about without being perved on. After a while, we poured a bucket of water on him, which for some reason caused him to go into a rage, so we buggered off laughing.

One Sunday afternoon, Casanova and I had a dust-up. I never particularly liked him as I had him marked as a bit of a sniveller, which was later proved beyond reasonable doubt. What the punch-up was about, I can't remember and once it was done, we shook hands, had a beer and realised how stupid it all was. Fighting was a no-no and if you did not have a really good excuse, you would find yourself on the end of disciplinary action. Somehow, we had both inflicted impressive black-eyes on each other for which we would be called to explain, so we cooked up the excuse

that one of us had been jumped in town and the other came to his aid. The next morning's parade was in dress blues and as usual, I was 'Right Marker' - with my black eye. Directly behind me was Casanova - with his black eye. Behind him was another fellow who had a birthmark on his face that also looked like a black eye. So, the officer doing the inspection was greeted with the sight of a neat line of three blokes sporting horrendous looking facial bruises. He took a second look, grinned, shook his head, said nothing and carried on.

Among the other staff on a training base, one could always count on there being at least one or two 'odd-ball' staff members, who liked to think they were tough on the students. This 'toughness' could take any one of a number of forms. On arrival at Wagga, we were temporarily barracked in the transit blocks. Transit accommodation is notoriously poor when it comes to quality. It is the RAAF equivalent to living in the outer northern suburbs of Adelaide so the South Australians thought of it as home, but to the rest of us…not so much! One day, the place was renovated – we had new carpet on the floor and fresh paint appeared on the walls. Then we got a new Block OIC who thought she owned the rights on what constituted cleanliness. This Flying Officer was insane; nothing we did would satisfy her standards. We were still fresh from 1RTU and knew how to clean, and it wasn't long before it became apparent that she either had a screw loose or just hated men. It turned out to be another divorcee working off her hate on lowly airmen. In the end we appealed to the Base Warrant Officer Disciplinary (WOD) to come over and inspect the block to see if it met his standards, which it easily surpassed. So, the WOD kindly intervened on our behalf and got that nutcase off our backs.

The other standout candidate was a squadron leader who was just peculiar. He had a habit of interrupting people and groups marching around peacefully getting about their business (being in training, you had to march everywhere) to castigate them on sloppy marching technique and or disorderly movement (enjoying yourself). At stand down, when driving home, he would even stop and get out of his car and make a song and dance of nothing if he suspected the slightest infraction. This same bloke also had a funny way of marching (that looked like he had something wedged up his arse) which people would imitate so, probably why he came across as being so paranoid and angry. A lot of people ended up on Friday afternoon Continuation Training at the WOD's pleasure because of this martinet. One afternoon, my course was marching home at the end of the day and we just happened to be having a bit of a skylark at this fellow's expense when guess who drove around the corner? Well, the inevitable happened and he got out and demanded to know, 'What's so funny!' A very awkward silence followed as we stood there at attention, until I, correctly as per regulation, broke rank then came to attention again and said in a proper military voice:

Me: 'Permission to answer your question, Sir
SQNLDR: 'Go ahead airman'
Me: 'Well, what do you do if a bird craps on your bonnet?'
SQNLDR: 'What!'
Me: 'It's quite simple really, you just don't take her out again.'

I then made the correct drill movement to move back into file. The SQNLDR just shook his head and told us that we should be silent when moving around the base. I think somehow maybe that might have made his day. My colleagues thought I was insane at having just risked their collective necks but breathed a huge sigh of relief when we got away with it, as this SQNLDR had looked very angry, but now he was trying hard not to laugh.

Decade Of Aviation Innovation Honoured

Reprinted with permission from CONTACT magazine

Story by Corporal Jacob Joseph

Australia Day Award recipient Sergeant Justin Kurban, an aviation technician with 37 Squadron, RAAF Base Richmond

An avionics technician who developed bespoke secure communications for C-27J Spartan aircraft and rapidly assembled a Hercules maintenance crew for deployment to assist in evacuating Afghan civilians was among those honoured this Australia Day.

Sergeant Justin Kurban received a Medal of the Order of Australia for his work at 35 Squadron and 37 Squadron over almost a decade, including technical achievements and new ways of managing personnel to improve efficiency. He implemented a system to track flying hours of maintenance crew, who are often required on board when an aircraft leaves on task. 'We've had people running about 300 flying hours in the year', Sergeant Kurban said. 'A moderate-flying pilot might do around 450 to 500.'

For Sergeant Kurban, who has clocked hundreds of hours in the air, passing over deserts and snow-capped mountains, the mission was reward enough. 'With fast jets it was a lot of training flights and bombing camps', he said. 'In Air Mobility Group, I've been on countless humanitarian tasks and helped lots of people. That's been a driving factor to make the platforms a better capability and made my work feel more worthwhile - but never in my wildest dreams did I think someone would nominate me for an award.'

Sergeant Kurban switched from fast jets to cargo aircraft almost a decade ago, working with Flight Sergeant Chris Winser ever since, and more recently Sergeant Gavin Jefferis, who both put his name forward for the award. 'He's an expert technician and computer programmer who has enhanced C-27J and C-130J capability', Flight Sergeant Winser said. 'He is an utmost professional who consistently goes above and beyond. When you think about all the things he's achieved over two squadrons, the OAM is fitting.'

'Fights in the Air' – 1916

Reprinted from 3 SQN History

Reproduced below is a letter from Gunner William Brake, of the 4th Field Artillery Brigade, AIF. (Newly arrived near Armentieres on the Western Front, in Northern France.)

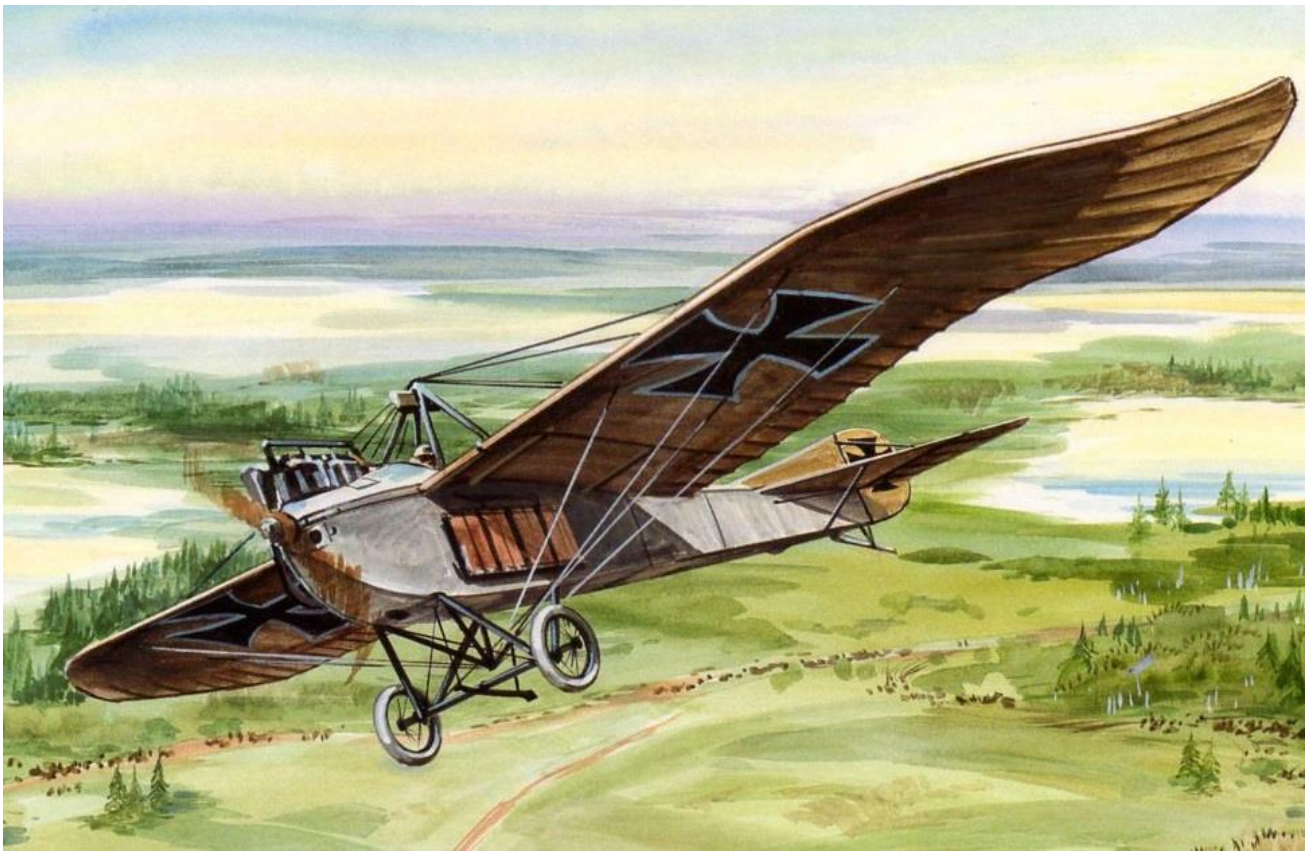
Later William transferred to the ground crew of 3AFC. He was writing to his brother James, who at the time was undergoing flight-training at Point Cook in Australia. James Brake was one of 3AFC's Flight Commanders.

c 1916. William Brake (left) and James Brake (right); both photographed at their family home in Mont Albert (a suburb of Melbourne). [Photos: *Australian War Memorial*]

May 25, 1916.

I was pleased to hear that you are in the Flying Corps. As we see more planes here than we do trains, trams, or any other locomotive vehicles, I thought I might drop this note and let you know a few of the incidents I have seen. Fritz [i.e. The German Air Service] has some bonzer

planes. Practically all the planes used here are biplanes. I've only seen about two monoplanes since I've been here. I think they are mostly Fokkers, although I have seen a few Taubes.



Painting of German Taube ('Dove') by Tony Theobald. [AWM A00831]

On one occasion I saw a 'go in the air' with the machines firing shots at each other, but it didn't last long. It's interesting to see them going like mad for highest elevation. Immediately a plane gets near the enemy lines, it is peppered - shots poured into it - and although it may seem a lot, a gun must fire thousands of rounds before it brings an aeroplane down. A plane may be hovering around a position for, say, half an hour, and it is nothing uncommon to count 150 bursts in that time. It's great sport looking at them. The shell they fire is about a 3-inch, and would weigh about 13 lbs. They make a great whistle going up into the air. Airmen seem to have a charmed life, although I've seen three or four brought down at different times. Of course, it all depends on the hit, but a Fritz came down one day not far off here, falling anyway.

Another night, about 6 p.m., I saw as good a looking sight as you could wish to see, although it did end in a man being shot. First of all, for observing purposes, their planes fly high up, while ours do the opposite, and fly very low. Well, this night, one of our planes went over observing for artillery fire. It was flying up and down about over our first-line trenches, and at height of (just a guess) 500 or 600 feet. It seemed to just skim over the trees. It was going up and down like this for about twenty minutes, with anti-aircraft shells bursting all round it, and the exhaust of his engine was almost drowned by Fritz's machine guns. It seemed too good to last, and so it was; the pilot got a shot through the back of his head, killing him instantly, and as he fell forward the engine stopped. The observer brought the machine down, but was not able to start the engine again before reaching the parapet of our support trenches (second line).

When the enemy noticed the machine coming down, they ceased to fire at once, and held their fire until the observer took the pilot's body out and got clear himself, and then shells fell like rain

on it and caught it on fire, which finished it. The observer was uninjured. Two more machines came out then, to see where their mate had fallen, and were allowed to come up to the spot and circle round a few times before a shot was fired. Once they got away, the firing started again. Old Fritz proved himself a 'sport' in this encounter, anyway. I suppose just to keep Fritz from getting cocky, these two gave an exhibition of flying, and dodging shells by the hundred and machine-gun bullets by the… (Well, it's beyond me). It was the best three quarters of an hour I've ever spent as a spectator at any "sport". They were at a height so low that I was frightened their propellers might catch in the tall trees about. They got away without a hit as far as we could see.

4th June.

It seems a good while since I started this, but think I may as well go on as start another letter. Since the first date on this letter things have been fairly lively up above; they seem to be firing more at our planes lately for some reason or other, and lately we have got hold of some very decent and fast machines. On three occasions I've seen our machines fired at, and, as far as we could see, untouched, with anything up to 1,000 rounds each time.

British F.E.2b

You would not think it possible to fire so many shells and not hit something. You must remember most of the shots were very close. It's great to see them turning and diving to dodge the shots. We have both scouts and fighting planes above us every day. Some new machines (fighting planes, I think) have come along lately, and you ought to see them travel; it's a sight for sore eyes; and their engines have a deafening roar. One of the latest planes has its propeller at the rear of the front plane; it can shift, too.

I used to think their machines were better than ours, but I am beginning to doubt it now. One thing I am sure of: their men are not better than ours; our fellows seem to have no 'nerves' at all. Taking the R.F.C. all round, there are very few casualties (on this front, anyway).

Up to date, everything has gone pretty good with us. In my lot [Artillery] there has only been one man wounded since we've been here, so you see we keep well under cover. There are dozens of us had pretty close shaves, but at this game a miss is as good as a mile. We get an assortment of shells sent over at us. A 12-pound shell is known as a 'pip-squeak'; a 14 lbs. (their field gun) a 'whiz-bang'; then there is a 4.2" and a 5.9" (15 centimetres) known as a 'coal box', owing to the black smoke it makes when it bursts. The 5.9 is only used when they think they are 'on' something. If they get 'on' anything with one, believe me, the something moves! (Unless it is a mountain.)

One falling and bursting in an ordinary paddock would make a hole about 6ft. across and about 2ft.6in. deep, or shift about a dray-load of earth. This is about as big a shell as we get round here; anything bigger is used only for bombardment purposes. I was back for a few days spell one

time, and for some reason or other they decided to make a shot at a house near where I was (about 300 yards away). The first shot fell short - about 200 yards off - but wait until I tell you the ammunition - 9.2"! The second shot went over by about 100 yards; the third shot 'lobbed' in the middle of the place - a large farm house, with stables, etc, adjoining.

When I heard the whistle of the first shot coming louder and louder, I gave about three strides (each 10ft.) and dived head-first into a semi-dry drain. Well, it was from here that I did my observing. I'd rather be in that mud than chance a run across the open. Well, as I said, shot number three hit the house. After about five minutes, when the brick-dust, tiles, plaster, manure, carpets, etc., cleared away, I saw the place was in flames.

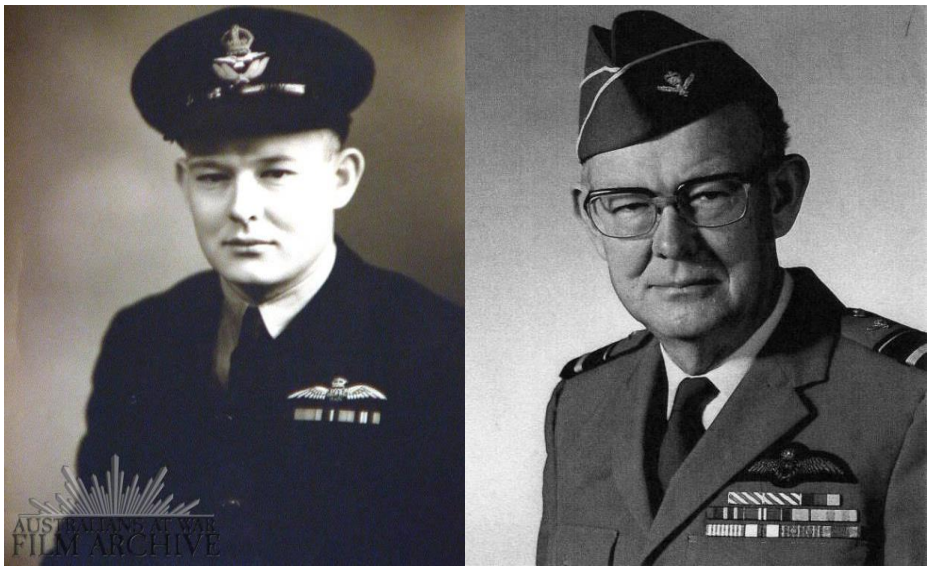
About another minute, a man ran out of the building one side, and a cow the other. (Stables and house are all in one over here). That chap ought to have a ticket in Tatts [lottery]; he couldn't lose. They put about ten shots in altogether. My joy knew no bounds when they decided to cease fire. Fellows everywhere seemed to be coming out of the earth itself - from drains, gutters, shell holes, etc.

When a bombardment like this starts, it surprises you how few drains and holes there are about. By now, we all prefer mud and slime to 'shrapnel wounds' obtained while fighting 'somewhere in France'. The piece of shrapnel which generally gives you the wound is about the same size -only about ten times the weight - of an ordinary teapot.

Passing of Pamela Barnes, wife of Air Vice-Marshal Frederick William Barnes AO, DFC, AFC (Ret'd)

From Kathie Thackray (daughter), via Jim Hall

Pamela Barnes, wife of the late AVM Frederick William Barnes, passed away on Tuesday night surrounded by her four children. She had missed her husband terribly for the past six years but family did their best to help her make the most of things. The family has requested her passing be advertised to the greater RAAF community.



033196 Air Vice-Marshal Frederick William Barnes AO, DFC, AFC (Ret'd) *rcds psc*
19 Nov 1924 – 5 Aug 2018

Air Force Quietly Bids Farewell to the 'Mighty Hunter'

From psnews.com.au, by Andrew McLaughlin
7 December 2023.
A follow up to the story in last issue.

For more than 50 years, the AP-3C Orion has been the RAAF's frontline maritime patrol and response capability. Photo: ADF.

One of the longest-serving and arguably most flexible aircraft in the Royal Australian Air Force has been quietly retired with little fanfare. The final flights of the last two Lockheed AP-3C Orion aircraft – the 'Mighty Hunter' in Greek mythology – were on Tuesday 5 December 2023. Both aircraft made commemorative flights along the South Australian and Victorian coastlines from their home base of RAAF Edinburgh in Adelaide.

The two aircraft – A9-657 callsign Striker 10, and A9-660 callsign Striker 55 – departed Edinburgh just after 11 am local time. Striker 10 flew west and then returned to Edinburgh via a low-level coastal run from Streaky Bay to the beachside suburbs of Adelaide, while Striker 55 flew east and returned low along Victoria's coastline from Torquay. Both aircraft met an RAAF PC-21 camera ship for commemorative photos over Adelaide and a couple of flypasts over Edinburgh before landing. They then taxied back to the ramp through a water cannon salute from two of the base's fire tenders.

An AP-3C taxis through a 'bird bath' which is used to wash salt water off the aircraft after low level flights over water. Photo: ADF.

The RAAF has had a long affinity with the Orion, ordering a total of 30 aircraft in three main batches for the maritime patrol role, plus a small batch of former US Navy aircraft that were used for a short period as trainers and subsequently for spare parts. The original 10-strong P-3B fleet entered service with No. 11 Squadron in 1968, although one aircraft crashed and was destroyed during trials in the US and was never delivered to Australia. A second batch of 10 more advanced P-3C Orions was delivered to 10 Squadron in 1978. In 1984-85, a third batch of 10 P-3Cs entered service with 11 Squadron to replace the original P-3Bs, most of which were sold to New Zealand and Portugal.

The P-3 was a converted Lockheed Electra airliner and was known for its rugged airframe, high reserves of power and robust handling at low levels. Originally designed for the anti-submarine mission and fitted with acoustic and magnetic anomaly sensors, torpedos and depth charges, the aircraft later took on an anti-surface role using the AGM-84 Harpoon anti-ship missile.

In the 1990s, the RAAF converted 17 of its 19 remaining P-3Cs – one was lost in a crash at Cocos Island in 1991 – to the much more advanced AP-3C configuration under Project Sentinel. The upgrade included more advanced sensors, communications, navigation displays and console displays for the sensors. Meanwhile, the other two aircraft were quietly modified to an electronic and signals intelligence (ELINT/SIGINT) configuration under the then-secret Project Peacemate.

For nearly 60 years, the Orion has served with a large number of air forces and navies, including those of the US, Japan, South Korea, Taiwan, New Zealand, Thailand, Pakistan, Germany, the Netherlands, Portugal, Spain, Norway, Greece, Iran, Canada, Chile, Argentina and Brazil.

An AP-3C and its successor, the RAAF's first P-8A Poseidon in 2016
Photo: ADF.

Several US Navy programs to replace its P-3s were started and subsequently cancelled as the P-3 was upgraded and refurbished, until in 2004 it selected the Boeing P-8A Poseidon – a modified version of the 737-800/900 airliner – under the Multi-mission Maritime Aircraft (MMA) program. The RAAF subsequently joined the MMA program as a cooperative development partner and, since 2016, has taken delivery of 14 P-8As to serve with 11 Squadron. As the P-8As entered RAAF service, the AP-3Cs began to be phased out. By 2018, only the two ELINT/SIGINT aircraft remained, although one former RAAF AP-3C has been retained in a flying condition by Shellharbour's Historical Aircraft Restoration Society (HARS).

At this time, the RAAF had little choice but to acknowledge the existence of these aircraft and their AP-3C(EW) designation, although keen spotters had already noticed the physical differences between the two sub-types.

The EW aircraft operated extensively over Afghanistan and other areas of the Middle East during the 2000s and 2010s, and more recently over the southern Philippines and South China Sea regions, using their advanced sensors to monitor and process radio and other communications of ISIS terrorists and China's PLA-Navy, respectively.

It's a wonderful legacy to the AP-3C's RAAF service that it will actually take three new aircraft types to replace the missions it has performed over the past 55 years – the P-8A Poseidon, the high-flying MQ-4C Triton uncrewed maritime reconnaissance system which first flew in November, and the MC-55A Peregrine ELINT/SIGINT aircraft which is due to enter service next year.

Outgoing CO of 10SQN WGCDR Marija Jovanovich describes flying the P-3 as the 'greatest privilege of my career'.
Photo: ADF.

It's a tribute to the aircraft and the people who flew and maintained it, that 10 Squadron was awarded the Duke of Gloucester Cup as the RAAF's most proficient flying unit in 2020. This is a remarkable feat, considering there were only two aircraft, which were nearly 40 years old, and it was achieved during the peak of the COVID pandemic.

Of the award, 10 Squadron's outgoing Commanding Officer and US Air Force Test Pilot School graduate, Wing Commander Marija Jovanovich said at the time, '10 Squadron is proud to fly and achieve outstanding outcomes on the oldest currently serving operational aircraft in the RAAF inventory'. 'The P-3 community is a passionate community and it has been the greatest privilege of my career to fly the aircraft, command the final P-3 squadron, and play a small role in its long and distinguished operational history.'

Keeping Enlisted Voices at the Forefront

From www.defence.gov.au, 29 January 2024

Senior enlisted adviser to the Chief of the Defence Force, Warrant Officer Ken Robertson.
Photo: Lauren Larking

Continuous support to domestic operations without much respite was one issue raised with the Senior Enlisted Advisor to Chief of the Defence Force (CDF) (SEAC), who took stock of issues facing ADF personnel from across the three services. SEAC Warrant Officer Ken Robertson said personnel were willing to assist when governments requested support after adverse weather events. 'But there's also a sense from the troops of when they'll get a break, some downtime to spend with families, especially over that Christmas period' he said. 'If people don't get that respite, it will lead to frustration, and may cause retention issues.'

To ensure concerns like these are heard at the highest levels, CDF General Angus Campbell appointed Warrant Officer Robertson in the new position last year, creating a voice for enlisted ranks in CDF's office. He's spent the past six months developing relationships to be a conduit of information between the workforce and decision-makers.

During base visits, he often smiles when noticing that Navy, Army and Air Force personnel sometimes raise the same issues. 'It's somewhat reassuring. If issues are common across the services, it means that problem-solving and solutions can be shared and applied sooner', Warrant Officer Robertson said. The bulk of his efforts go towards retention and recruitment, and conditions of service, as well as having input in honours, awards and military justice policy.

Warrant Officer Robertson acknowledged Defence's challenges but found the most rewarding visits were those where he learnt about the positive aspects of service life. 'We wouldn't have thousands and thousands of personnel unless there was something great about service life. I think it's my job to also champion that', he said. 'Every trip I go on, I get told the outstanding achievements of our organisation, whether it's on deployments, preparedness, or training.' Apart from workforce advocacy, the role has a representational side, travelling with CDF internationally. 'We're the last Five Eyes nation to create a SEAC position, which means we now

have a senior enlisted leader representing on the international stage', Warrant Officer Robertson said. Warrant Officer Robertson's goals for this year include visiting additional regions such as north Queensland, Tasmania and other remote bases. 'If they remember one thing from my visits, it's that they have an enlisted voice within the office of CDF, speaking truth to power, on their behalf', he said.

76SQN Troops Tales

From Les Anderson

76 Squadron flight line personnel used to have a bet on where the nose wheel would stop once the aircraft was marshalled and stopped. We used to mark crosses on the ground and it was two dollars in and winner take all.

Once the pilots found out what we were doing their taxiing got a whole lot better!

Photo: www.aviationphotocompany.com

Question: Why don't retirees mind being called seniors?
Answer: The term comes with a 10% discount.

Question: Among retirees, what is considered formal attire?
Answer: Tied shoes.

Question: Why do retirees count pennies?
Answer: They are the only ones who have the time.

Another $400 Million to Expand Ghost Bat Development

The Royal Australian Air Force has invested an additional $399 million in the ongoing development of the MQ-28A Ghost Bat program.

A 'Loyal Wingman' prototype – now called MQ-28A Ghost Bat – flies over Woomera, South Australia (September 2021)
Photo: Flight Lieutenant Ricky Treloar

Defence is now moving forward with the next stage of the program, including delivery of three Block 2 aircraft, which have an enhanced design and improved capabilities. This funding boost will enable a focus on developing sensor and mission payloads, an integrated combat system and autonomous systems.

Minister for Defence Industry Pat Conroy said the goal was that these new aircraft would be ready for a capability demonstration exercise next year for the Royal Australian Air Force. 'That will really help establish how capable these aircraft are, and the manner in which we would like to deploy them', Mr Conroy said. 'A couple of examples of where these aircraft might be used is they [could] emit signals so they appear like they're another Joint Strike Fighter to an enemy radar, which means that they could act as a decoy. They could also be in advance of a strike group from the air force, collect targeting data of where possible enemy ships are so that our planes never have to go into range of the enemy's defensive weapons. These are all things much better to risk an autonomous aircraft that costs 10 per cent of a crewed aircraft, let alone risking the life of a pilot and the huge investment we've made in that person.'

Mr Conroy said this was the first military aircraft to be designed, engineered and manufactured in Australia in more than 50 years and underscored the depth of innovation and expertise in Australia's defence industry. 'More than 200 Australian companies have already contributed to the MQ-28A program, including more than 50 small and medium enterprises within the supply chain', Mr Conroy said. 'This project demonstrates that with the appropriate support from government, Australia's defence industry can continue to be a world leader and a key source of jobs. Giving our air force the critical capabilities it needs to protect Australians, and their interests, is paramount for the prosperity and security of our nation.'

MQ-28A Ghost Bat, known as a Collaborative Combat Aircraft (CCA), is being developed in cooperation with Boeing Defence Australia. It is the first military combat aircraft to be designed, engineered and manufactured in Australia in more than 50 years. An entirely new technology, it

is designed to act as a loyal wingman which will be able to protect and support our military assets and pilots and undertake a wide range of activities across large distances, including performing combat roles.

This further development of MQ-28A Ghost Bat comes after the government agreed with a Defence Strategic Review recommendation that options be developed for collaboration and technology sharing with the United States. In line with the government's response, Defence signed a CCA development project arrangement with the United States on 30 March 2023.
Mr Conroy said the best minds in the United States and the best minds in Australia were working together to develop the platforms, payloads, sensors and system infrastructure to realise the potential of teaming technology as quickly as possible. 'Designed to act as a loyal wing man, we'll be able to protect and support our military assets and pilots and undertake a wide range of activities across huge distances, and importantly, in contested environments, including performing combat roles. This technology has the potential to turn a single fighter jet into a fighting team, with advanced sensors that are like hundreds of eyes in the sky.'

Managing Director of Boeing Defence Australia Scott Carpendale said that as Boeing continued to expand it's flight-test window and advance the MQ-28 autonomous capability, the company was also turning its attention to establishing an Australian production facility in Queensland.

55th Anniversary of 3 SQN Deployment to Butterworth

From David Penna

On 20th Feb 2024, a lunch was held to celebrate the 55th Anniversary of 3 SQN's deployment to Butterworth. The function was held at Yarra Rossa Retirement Village in Red Hill. Attendees were Bren & Gail Roberts, Bren & Helen O'loghlin, Niel & Maria Smith, Jack & Pat Smith, Dave & Patti Bowden, Brian & Renata Weston, Marty & Val Susans, Tony & Pam Mumford, Dave & Sue Penna, Mike Nixon and Terry Wilson.

A particular tribute was made to those who are no longer with us. Everyone enjoyed reliving the great days at 3 Squadron and Butterworth.

The Rising Sun

By Ken Bunker

At the going down of the sun, and in the morning, we will remember them. LEST WE FORGET.

With their hair a little whiter, their step not quite so sure
Still they march on proudly as they did the year before.
Theirs were the hands that saved us, their courage showed the way
Their lives they laid down for us, that we may live today.

From Gallipoli's rugged hillsides, to the sands of Alamein
On rolling seas and in the skies, those memories will remain.
Of airmen and the sailors, of Lone Pine and Suvla Bay
The boys of the Dardenelles are remembered on this day.

They fought their way through jungles, their blood soaked desert sands
They still remember comrades who rest in foreign lands.
They remember the siege of old Tobruk, the mud of the Kokoda Trail
Some paying the supreme sacrifice with courage that did not fail.
To the icy land of Korea, the steamy jungles of Vietnam
And the heroic battle of Kapyong and that epic victory at Long Tan.

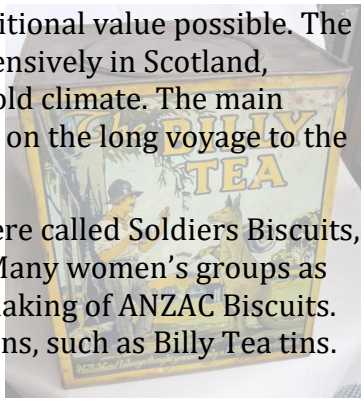
Fathers, sons and brothers, together they fought and died
That we may live in peace together, while at home their mothers cried.
When that final bugle calls them to cross that great divide
Those comrades will be waiting when they reach the other side.

The Story of the ANZAC Biscuit

Found in Gulgong Museum

During WWI, the wives, mothers and girlfriends of the Australian soldiers were concerned about the nutritional value of the food being supplied to their men. Here was a problem. Any food they sent to the fighting men had to be carried in the ships of the Merchant Navy. Most of these were lucky to maintain a speed of 10 knots (18.5 kph). Most had no refrigeration facilities, so any food sent had to be able to remain edible after periods in excess of two months.

A body of women came up with the answer – a biscuit with all the nutritional value possible. The basis was a Scottish recipe using rolled oats. These oats were used extensively in Scotland, especially for a heavy porridge that helped counteract the extremely cold climate. The main feature was that no eggs were used, otherwise the biscuits would spoil on the long voyage to the front.



All the ingredients used would not rapidly spoil. At first the biscuits were called Soldiers Biscuits, but after the landing at Gallipoli, they were renamed ANZAC Biscuits. Many women's groups as well as school and church groups, devoted a great deal of time to the making of ANZAC Biscuits. To ensure that the biscuits remained crisp, they were packed in used tins, such as Billy Tea tins.

ANZAC Day

Courtesy of Roseville-Lindfield RSL Sub-branch; seen at Gulgong Pioneers Museum

I saw a kid marchin', with medals on his chest
He marched alongside diggers, marching ten abreast,
He knew that it was ANZAC Day and he walked along with pride,
He did his best to keep in step with the diggers by his side.

And when the march was over, the kid was rather tired,
A digger said, whose medals son? To which the kid replied,
They belong to Daddy, but he did not come back,
He died up in New Guinea, on a lonely jungle track.

The kid looked rather sad, and a tear came to his eye,
The digger said, don't cry my son and I'll tell you why,
Your daddy marched with us today, all the bloomin' way.
We diggers know that he was there – it's like that on ANZAC Day.

The kid looked rather puzzled and didn't understand,
But the digger went on talking and began to move his hand.
For the great land we live in, there's a price we have to pay,
We all love peace and freedom, in this country where we live,

And the price was that some soldier, his precious life must give
For you to go to school my lad, and worship God at will,
Someone had to pay the price, so then diggers paid the bill.
Your daddy died for us my son, for all things good and true.

The kid looked up at the digger, just for a little while,
And with a changed expression said, with a lovely smile,
I know my Dad marched here today on this our ANZAC Day,
I know he did, I know he did, all the bloomin' way!