

Remembering Lieutenant Merz: Australia's military aviation medical officer pioneer

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The Early Years

George Pinnock Merz was born at Prahran in Melbourne on 10 October 1891¹, the second child and only son of George and Annie Merz². When he was about six years old, the family moved to Ballarat where Merz began his education at the highly regarded State School No. 34 in Humffray St. Merz was dux of the school in 1905. He went on to attend Grenville College where he continued to excel, passing both junior and senior public school exams and matriculating on 31 March 1909. He also won an exhibition prize of 200 pounds towards studies at the University of Melbourne².

Merz began a medical degree at the University of Melbourne in 1909, deciding on this career because he had a genuine wish to help people³. He obtained honours in Therapeutics, Diet and Hygiene, Medicine, Clinical Medicine and Obstetrics and Gynaecology⁴. In addition to excelling in his medical studies, Merz commenced his association with the military and was commissioned as a 2nd Lieutenant in the Melbourne University Rifles (MUR) on 16 May 1913⁵.

An Interest in Flying

As the world geared up for war in 1914, Merz was preparing for his final examinations in medicine to be held in August. He also became enthused by the idea of flying³, probably fuelled by the news of the new military flying school at Point Cook, on the outskirts of Melbourne, and the first flights undertaken from the School by Lieutenants Henry Petre and Eric Harrison⁶.

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Abstract

Early in 2003, as many of its aviation medicine trained military medical officers headed off to support the war against Iraq, the Australian Defence Force (ADF) officially classified these personnel as Aviation Medical Officers (AVMO). Ninety years ago, the man who can be regarded as Australia's first AVMO also headed off on the "great adventure" of war in the Middle East. This man was Lieutenant George Pinnock Merz.

Lieutenant Merz began his military aviation career on graduating from medicine, becoming one of the first four to graduate as a military pilot in Australia in November 1914. Shortly afterwards, he participated in the first overseas deployment of Australian military aviators to German New Guinea. Following a brief tour as an instructor at Central Flying School, Point Cook, he deployed with the first Australian Flying Corps operational deployment to Mesopotamia, now Iraq. Flying by day and tending patients by night, Lt Merz managed to combine both his profession and his hobby until his remarkable life prematurely ended on 30 July 1915.

His interest was further piqued by the announcement that military officers, one from the permanent staff and three from the citizens forces (of which the MUR was a component), were to be trained as aviators commencing on 17 August 1915⁷.

The three month course was to include training in a variety of aviation related subjects including the Art of Flying, engineering, navigation and identification of warships and aircraft of other nations. Merz met the criteria for selection as a pilot trainee in that he was aged between 20 and 26 years old, held the rank of Lieutenant, had been commissioned for two years, weighed less than 14 stone, and was unmarried⁸. He was also adjudged to be fit to fly, in that he was free from organic disease, had normal vision, did not have a history of hernia ("not ruptured"), and was capable of bearing the fatigue associated with flying⁹.

Merz was convinced that he had to take advantage of this opportunity. According to his father, Merz "...asked me to let him take up flying for 3 months as he had 5 years hard studying for Medicine. The wife and I allowed

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him to go.”¹⁰ George qualified for his degree in medicine on 21 September 1914 however, even before graduating, he was selected to begin training on the first ever flying training course at Central Flying School (CFS), Point Cook.

The First Course

On 18 August 1914, two weeks after the outbreak of war, Merz and his fellow students, Captain Thomas White and Lieutenants Richard Williams and David Manwell, began flying training at CFS. Point Cook was little more than a sheep paddock at this time with corrugated iron and canvas hangars, a barracks block, and tents for officer accommodation. Merz, the youngest of the four, was the first of his course to fly, taking off in a Bristol Boxkite at 0550 with Harrison as pilot. His first flight lasted five minutes, covered three miles, and reached an altitude of 100 feet¹¹.



Lt G.P. Merz in uniform
(source: Mrs. Alice Greetham)

The Boxkite, also known as the “Beginner’s Bus”, was a light weight, biplane which had neither cockpit nor fuselage. It had a maximum speed of 65 miles per hour¹² and its only instrument was a glass tube alongside the pilot’s seat through which oil passed⁹. Apart from this rudimentary fuel gauge, pilots were required to use their senses to interpret flight parameters. According to White, “...one’s ears did duty as engine counters; the rush of air in the face told whether the climb or glide was at the right angle...”¹³. The student sat behind the instructor, both on wooden seats and without a harness, meaning that a bumpy landing could eject both pilot and seat from the aircraft. There were no dual controls and therefore students were required to put their hand on the instructor’s hand, which was guiding the control stick, and watch the instructor’s feet¹⁴. After a few familiarisation flights, instructor and pupils swapped places and a few flights later the pupil was allowed to go solo. Once solo, according to Williams, “...the pupil received no further instruction unless he sought it, something the confident young man seldom does”⁹.

Although beaten to the honour by Manwell, Merz had his first three minute solo flight to a height of 100 feet on 4 September 1914¹¹. Instructor reports indicate that he was somewhat slow to start¹⁵, however Merz soon became the literal high flyer of the group, often attaining altitudes of seven to eight hundred feet. Merz may have had somewhat of an advantage over his classmates, as at five foot seven inches and 10 stone¹ (170 cm, 64 kg) he was the smallest and lightest of the aviators¹⁶. Unlike his fellow students he also managed to avoid major mishaps. On 29 October 1914, after just under seven hours of flying in the Boxkite of which only three hours were solo, Merz became the first of the group to undertake the “A” Flight of his Brevet test. Unfortunately he missed the landing and had to retest. Williams was therefore the first pilot to gain wings in military flying in Australia while Merz followed two days later on 14 November 1914¹¹.

During the course, the students had flown as passengers in one of the School’s more advanced trainers, the BE2a. At the end of the course Merz and Williams were permitted to fly this aircraft after taking the Boxkite to 1500 feet, turning off the engine and landing it without restarting⁹. Merz reached an altitude of 2000 feet in his 21 minute flight but later discovered that the ceiling of their trainer was only 1100 feet. Merz flew two sorties in the BE2a including a 19 minute flight to Williamstown reaching the dizzying height of 3500 feet¹¹.

The course officially finished on 28 November 1914. Merz was the outstanding student on the course gaining a distinguished mark in every subject and passing with Honours overall¹⁷. He graduated from the course with a total of 10 hours and 25 minutes of flying time on the two aircraft types, of which half was solo. Overall, the reports on Merz were glowing. He “...handled his machine with skill and judgement”¹⁵ and “...should make a good Flying Officer, both for regimental duty or on the Staff.”¹⁷ This is in marked contrast to some of his fellow students. White was described as “...an unreliable flyer, wanting in judgement”, and Manwell “...showed such incompetence and want of judgement, that it is a little doubtful whether he would make a good Flying Officer.”¹⁵

Merz was awarded Royal Aero Club aviation certificate number 1026¹⁸ upon graduating, which was the equivalent of an international civil aviation licence¹⁹. There was no formal Wings ceremony as the design for the badge had not yet been finalised. The newly graduated pilots did not receive their Wings until January 1915 when they had to purchase them at a cost of three shillings and sixpence each⁹. By this time, the next phase of Merz’s career had already begun.

Australia's First Military Aviation Deployment

On 27 November 1914 CFS staff were informed that air power was required in German New Guinea in support of the Australian Naval and Military Expeditionary Force²⁰. It had been decided that the emerging technology would prove invaluable in reporting on the position of German ships. Captain Harrison was selected to lead the mission and he selected Merz to accompany him as second pilot and second in command. Two aircraft were chosen for the task – a BE2a and a Maurice Farman Hydroplane, donated by a private citizen¹⁹. Merz and the party, which included four mechanics, the aircraft and 12 months of stores, were ready to leave the following day²⁰ and set sail from Sydney on 29 November 1914, aboard the *HMAS Una*¹⁹. This represented the Australian military's first operational aviation deployment.

The aviation force sailed first to Wilhelmshafen (Madang), where Merz succumbed to malaria and then on to Rabaul, arriving on 17 December 1914. On the way, the aviators and mechanics spent their time making bombs from 36 lb lyddite shells fitted with small propellers to ensure a straight descent²¹. By the time Merz arrived, the strategic situation had changed. The Germans had withdrawn northwards and Australia's mission was confined to the Southern islands of New Guinea. As a result, the aircraft were not even unpacked from their crates, a major disappointment to the small aviation task force. Merz returned to Australia on 20 January 1915.

Student Turns Instructor

Merz returned from New Guinea with the intention to head off to war as a Regimental Medical Officer with his friend and colleague Thomas White as he did not believe he would see action as an aviator¹³. Before he was able to do so, Merz was selected by Petre and Harrison to join the instructing staff at CFS as the second course was starting in March 1915 and was to consist of eight students – a heavy workload for just the two of them. This did not sit favourably with Merz at first and he informed the Army that he was primarily a doctor and saw flying as merely a hobby. Apparently a compromise was reached and Merz agreed to remain at CFS provided he could continue his medical work at the Melbourne Hospital twice a week¹⁰. Merz celebrated his return to Point Cook with his longest and highest flight to date - a 45 minute flight in the BE2a over Melbourne at 6000 feet²².

Merz shouldered much of the workload during the early phases of the course, flying up to 16 sorties a day and over 16 hours out of a total of nearly 47 hours for the entire second course, which included student solos¹¹. Unlike the first course,

the second course was relatively uneventful with no student mishaps. The report on the course attributed this to more thorough tuition in the early stages of the course²³, no doubt in part a reflection of Merz's abilities. Despite his heavy workload combining flying and medicine, he found time to become engaged to a nurse, Miss Dora Rowe, during this period³.



Merz at Central Flying School, Point Cook
(Source: Royal Australian Air Force)

Formation of the Half Flight

Even before Merz began his work at CFS, events were unfolding that would determine his future path. The British and Indian Army campaign in Mesopotamia had begun in November 1914 and plans were underway to advance up the Euphrates and Tigris Rivers in preparation for taking Baghdad. It was considered that airborne reconnaissance could prove decisive in this campaign. On 8 February 1915, the Commonwealth Government received a request from the Indian Government to supply trained airman, flying machines, motor transport, mechanics and spares to support the campaign. Australia responded two days later, offering airmen and mechanics but not aircraft²⁴.

On 23 February 1915, the Minister for Defence, Senator Pearce, announced that Australia would be sending a small team under the command of Captain Petre, which would include two or more military aviators, mechanics, a travelling workshop, vehicles and horses²⁵. The Half Flight, a Flying Corps of 45 personnel (including four airmen), was formed shortly thereafter. Once again Merz was hand picked by his instructors for an important role and was joined by Captain White and Lieutenant Treloar, who had learnt to fly in England²⁶.

Merz completed his application for a Commission into the Flying Corps on 10 April 1915 in preparation for his departure to Mesopotamia. However as students on the second course had not yet gone solo, to his great disappointment, he was advised that his departure would be delayed by a month²⁴.

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Before they departed, the officers of the Half Flight joined other members of Australia's fledgling aviation community in attending the inaugural meeting of the Australian Aero Club, held on 9 April 15 at the Café Francais. Petre was elected President of the Club, with the youthful Merz becoming a member of the committee²⁷. Petre sailed for Bombay as the Advance Officer on 14 April 1915, with White leading the rest of the party, with the exception of Merz, on 20 April.

Off to the Great Adventure

Merz finished his duties at Point Cook three weeks before the completion of the second course. On 12 May 1915, he undertook a farewell flight of 1 hour and 12 minutes over Broadmeadows and Bundoora¹¹, his last view of Australia from the air. He left for the front on 18 May 1915 on the P&O Mail Steamer *Mooltan*²⁸ and was undoubtedly delighted to discover medical and nursing colleagues of the 3rd Australian General Hospital on board²⁹.



RMS Mooltan departs Melbourne 18 May 1915

The *Mooltan* was a regular passenger ship and Merz was allocated a First Class Saloon ticket as were most of the other doctors on board, much to the chagrin of the nursing staff³⁰. Despite these relaxed surroundings, for the hospital personnel, life on board the ship did not resemble a cruise. Physical training sessions were organised twice a day (optional for the officers and nurses), there were frequent kit inspections and needle parades, first aid and nursing lectures were given to the medical orderlies, and military lectures to the nurses²⁹. A Medical Society, which was open to all medical officers, met every morning to discuss topics such as general medicine, surgery and pathology³¹. The ship made calls at Port Adelaide, Fremantle, Columbo, and Bombay³² where Merz disembarked for final passage to Mesopotamia.

Air Operations in Mesopotamia

The majority of the Half Flight had arrived in Basra on 26 May 1915 where they became part of Indian Expeditionary Force 'D'²⁴. The Australian

airmen were joined by two officers of the Royal Flying Corps, Majors Broke-Smith and Reilly and Lieutenant William Wallace Burn, an Australian-born New Zealand Army officer who had learned to fly in England³³. The Half Flight was provided with two Maurice-Farman Shorthorn biplanes³⁴, known by the airmen as "Rumpeties"¹³, which were unreliable and so underpowered that they often flew backwards in the local seasonal wind known as the *shamal*¹⁹.

Within four days of arriving, the airmen of the Half Flight participated in their first missions as part of an advance up the Tigris River²⁴. The airmen were of great assistance in this advance, providing valuable reconnaissance information in the mostly flooded area around Amara, which was eventually taken on 2 June 1915³⁵. The aircraft had an instant impact, as an advance had not been possible for several months. Petre believed that the Arabs had been frightened by their first glimpses of flying machines and that the Turks viewed it as a sign of technological edge with which they could not compete³⁴.

Merz joined his colleagues on 13 June 1915. To avoid confusion in the multi-national force, he had been granted a commission in the Royal Flying Corps on 5 June 1915³⁶ however maintained his rank and Australian uniform²⁴. He arrived at the worst possible time of the year. The aircraft park was surrounded by flood waters yet it did not rain and temperatures were usually in excess of 110 degrees Fahrenheit³⁴(43°C). This not only caused problems for the personnel, but also for the aircraft which were constantly breaking down.

In addition to the heat, the flies were unbearable, the drying flood waters left a sea of mud and illness raged through the military personnel. Heatstroke, fever, and dysentery were prevalent and malaria posed a constant threat. A skin condition known as a "Basra sore" (probably cutaneous leishmaniasis) was common and many soldiers developed an ill-defined syndrome referred to as "Mesopotamitis"³⁷.

These problems had an effect on air operations. The personnel were required to work short hours due to the excessive heat and frequent illness took its toll³⁴. Preventative health precautions were implemented, including the use of quinine²⁴. Measures used to combat the heat and prevent heatstroke included spinal pads, solar topees, sunglasses and cholera belts. The spinal pad, which was said to protect wearers from sunstroke³⁸, and the cholera belt, which prevented a chilling of the abdomen³⁹, were pieces of cloth (often flannel) which were worn along the spine and around the waist respectively. Not surprisingly, Merz found these measures actually increased the heat load and reported that "...the sweat runs off in a steady stream"⁴⁰.

The poorly supplied and organized British Army medical services in Mesopotamia were overwhelmed as a consequence of the high rates of both battle and non-battle casualties. The medical support to the Mesopotamia campaign at this time is universally regarded as a total disaster. There were major shortages of medical personnel, equipment, and transport, a lack of surgical capability at the front and a complete failure of the medical evacuation system⁴¹. Merz still thought of himself as a doctor as much as an airman, and went off to war intending to continue in a part time medical role. A list of his personal effects includes medical books, his certificates and degrees, medical instruments, and surgical clothing⁴². In this role, he was no doubt welcomed by the British medical teams.

The Nasiriyeh Campaign

To the great relief of the airmen, two Caudron aircraft arrived on 4 July 1915 and Merz was immediately assigned to one of these machines. These aircraft, although more sturdy than the Rumpeties, were still less than satisfactory in the conditions and frequent engine problems were encountered²⁴.



Merz in a Caudron
(source: Australian War Memorial)

Merz began his operational flying career in the Basra region. However the thrust of the operations soon switched to the town of Nasiriyeh, northwest along the Euphrates River, which had to be cleared of the Turks before the main assault northwards could begin. Merz and Reilly were selected to provide support to this operation and flew the Caudrons up to that area on 19 July 15⁴³. Merz performed reconnaissance flights to map out the enemy positions and communicated this information to the ground troops by dropping notes in a tin can¹³. These flights were obviously not without excitement as Merz wrote to his father that he had he had been involved in some “tidy little scraps”⁴⁴.

Nasiriyeh was captured on 25 July 1915, and the value of the airmen to the campaign was noted by General Sir John Nixon, commander of the British Forces in Mesopotamia⁴⁵. For his contributions to the battle of Nasiriyeh, Merz was Mentioned in Dispatches on 4 April 1916⁴⁵.

Although the British forces were victorious, the necessity to engage in hand to hand combat meant that casualty rates on both sides were high²⁴. A makeshift hospital was established in location and it was here that George Merz was able to put his medical skills to use. According to many sources^{10,13,18,24,46}, Merz was treating patients throughout the night of the 29 July 1915 at the understaffed hospital^{10,13,18,24,46}.

Death in the Desert

With the battle over, Merz with Burn as his passenger, then Reilly, set off from Nasiriyeh between 0500 and 0600 hours on 30 July 1915 to return to Basra⁴⁷. The two pilots had agreed to keep together as much as possible due to the many engine problems being experienced. However they lost contact when Reilly succumbed to engine trouble and was forced to land near a village about 20 miles from Nasiriyeh. Fortunately the local Arab tribe offered him assistance, allowing him to fly on and meet up with Petre at a refueling station. Merz had not arrived by this time and both men thought he had continued on to Basra⁴³.

Major Reilly flew on to Basra the following day but returned to the station on 2 August to report that Merz had not arrived. With Petre, he set off in search of the two lost aviators and found the badly damaged aircraft 25 miles to the west. It appeared that the aircraft had made a normal landing but had been damaged on the ground, with fabric cut by knives and a broken tail and nacelle. There was no trace of the two airmen nor any signs of a struggle. Reilly and Petre continued westwards for another five miles but found no evidence of the fate of Merz and Burn⁴³.

An investigation was launched and local Arab tribesmen were questioned. The Court of Inquiry concluded that the aircrew had been forced to land due to engine trouble and were making repairs when they were set upon by a band of Bedouins of the Beni Malik tribe. The airmen, armed with pistols, engaged the Arabs in a running fight of about five miles towards the refuelling station, during which they killed one and wounded three adversaries. One of the airmen was wounded and could not go on but his companion remained with him and both died fighting⁴⁷. The bodies of the two airmen were never found. Merz was 23 years old.

On 24 August 1915, White joined an expedition to the nearby settlement of Gurmat Ali where the Bedouins had been headed. In a dawn raid, the village was searched however no evidence of the two men was found. The huts and tents of the tribe were destroyed and all weapons were confiscated⁴³. After this episode, long flights

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across country were banned until more reliable aircraft could be sourced¹³.

Merz's death was devastating to the men with whom he served. White described him as "a brilliant medico and the best of good fellows", and wrote "In the rush mess hut at Basra, we missed them sadly, and each wondered if when his own turn came he would die as nobly."¹³

The Legacy of Merz

Although Merz's death can probably be classified as more unlucky than heroic, and he died in what was ultimately a doomed campaign, it is symbolic as it was the first death of an Australian airman in war. In fact he was involved in many military aviation firsts during his short life. He was dux of the first course, was on the first operational deployment of aircrew, was the first student to become an instructor, and was involved in Australia's first air campaign.

His death also illustrates the tragic impact of World War One on his generation of young Australians. It is interesting to speculate as to what this talented young man may have achieved if he returned home from war. Two of those he outshone on his flying course, Williams and White, went on to have distinguished careers in military and public service and were later knighted, and several of Merz's students performed exceptionally in the war, with fellow MUR officer, Lieutenant Eric Simonson, becoming an air ace⁴⁸.

Importantly, Merz's death heralds the beginning of an era in Australian warfare – the moment when military flying lost its innocence and when the legend of the heroic Australian airmen began. General Sir John Monash, wrote⁴⁹:

"...it was in the most easterly theatre of the War that the foundations of these noble traditions of the Australian air-fighters were laid...".

Memorials to Lt Merz

Lieutenant George Merz is remembered on the Commonwealth War Memorial in Basra. His family was devastated at not being able to recover his body¹⁰. To commemorate him in Australia, Dr. George Merz's name was added to his mother's gravestone in St. Kilda cemetery in Melbourne when she died in 1930. There are other memorials to Merz, including the Honour Roll of the Australian War Memorial, the tree planted in his honour on the Ballarat Avenue of Honour in 1917 and the construction of Merz Road at RAAF Base Point Cook in 1938. More recently, the RAAF and RNZAF rugby teams competed for the inaugural Burn-Merz Shield in 2004 to commemorate the beginnings of the strong alliance between Australian and New Zealand airmen⁵⁰.

Of importance to practitioners of aviation medicine in this country, Merz was Australia's first military aviation medical officer, a fact finally recognized in 2003 when the AMSANZ Prize, awarded annually to the dux of the Aviation Medical Officer (AVMO) Course at the RAAF Institute of Aviation Medicine, was renamed the Lieutenant George P Merz Memorial Prize. By formally remembering Lt Merz at a time when our AVMOs are again serving in the Middle East, it is hoped that his story will inspire future generations of Australian Defence Force doctors with a passion for aviation.



LT G.P. Merz medals, wings and certificate
The citation reads:

*The War of 1914-1918
Australian Flying Corps
Lt. G.P. Merz, [Killed in action]
was mentioned in a despatch from
General Sir John Nixon KCB ADC
dated 1st January 1916
for gallant and distinguished services in the Field
I have it in command from the King to record His
Majesty's high appreciation of the services rendered.
(signed) Winston S Churchill
Secretary of State for War
1st March 1919*

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