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# Editorial

## Centenary of the Air Force

The medical service of the Royal Australian Air Force started in a small hut that served as the sick-quarters at Point Cook, Victoria. Its first doctor was Squadron Leader Arthur Poole Lawrence MC, a Melbourne graduate who had served with the Australian Army Medical Corps in France. Lawrence made the first observations of cyanosis in pilots after high-altitude flights without supplemental oxygen and included himself as a test subject.

In 1922 he was appointed Director of Air Force Medical Services at Air Force Headquarters, Victoria Barracks, Melbourne. The amalgamation of naval, military and air medical services was a live issue at this time. Neither the Director of Naval Medical Services nor Lawrence was enthusiastic about the plan of Major General Sir Neville Howse VC, DGMS (Army). At a conference in 1922, Howse believed that only one medical corps should provide medical services to all three Services. A further conference in 1925 recommended cooperation and coordination but with individual Service autonomy.

The Minister for Defence considered the report and ruled that the Director-General of Army Medical Services should be responsible to the Air Board for administering and controlling medical and dental services in the RAAF from 1 October 1927. Wing Commander Lawrence, now a member of the Citizen Air Force, became Deputy Director Medical Services (Air).

As can be imagined, Lawrence was a tenacious advocate for the Air Force, as a man who had survived his transport ship being torpedoed and sunk in the English Channel and having survived illness and active service on the Western Front leading to the award of the Military Cross.

As the Air Force gradually expanded in the years towards 1939, the medical service did so as well. The need for specialist expertise such as ENT and neurosurgery was recognised.

Group Captain R Fowler DDMS (Air) was appointed in 1936. He was foresighted and focused attention on the evacuation of casualties by air and the problems of operations in tropical areas.

The second great conflict of the century required a radical re-thinking of previously held positions. On 5 April 1940, the War Cabinet approved the recommendation

‘that the DGMS (Army) relinquish his responsibilities in the control of the Air Force medical service; and that medical matters requiring coordination between the navy, army and Air Force be dealt with by a standing committee consisting of the permanent medical directors of the three services.’ This was exactly the position advocated by Navy and Air Force in 1925.

In early 1940 Dr Thomas Ernest Victor Hurley CMG was a surgeon at the Royal Melbourne Hospital and dean of its clinical school. He had served in the Australian Army Medical Corps on the Western Front in the previous war. He was appointed DGMS Air Force with the rank of Air Commodore and was responsible for the rapid growth in the number of medical personnel and their effective utilisation. A sensible system of appointment of specialists and consultants to the Citizen Air Force enhanced the treatment of RAAF personnel. Medical Branch Technical Instructions were circulated regularly. A rational system of data collection for both operational and medical planning was introduced. Special attention was directed to the problem of malaria.

In July 1940, a RAAF Nursing Service was established with Matron-in-Chief (Group Captain) Margaret Irene Lang, who had served with the Australian Army Nursing Service during the First World War. The RAAFNS was a branch of the RAAF, and all members wore RAAF commissioned rank and embellishments. As well as serving in bases in Australia, Air Force nurses served in New Guinea and on troop convoy ships to the Northern Hemisphere.

In 1944 No. 1 Medical Air Evacuation Transport Unit was formed and staffed by Air Force nurses. These nurses exercised considerable clinical autonomy in the in-flight care of the sick and wounded, including liaising with aircrew about recommendations for the height and speed of flight. The care of returning prisoners of war from Japan, then casualties from Korea and Vietnam, has led to increasing sophistication in the aeromedical evacuation (AME) procedures. The current RAAF Military Critical Care AME Teams provide intensive care unit levels of care during strategic AME flights of great distances as well as humanitarian and disaster relief.

A Directorate of Dental Services was established, and in March 1943, Group Captain N H Andrews was appointed as Director of Dental Services and a part of the staff of the DGMS. Maintaining the dental fitness of aircrew was a particular concern to avoid the effects of barodontalgia. RAAF Dental officers also worked in the plastic surgery unit at No. 115 AGH in Melbourne.

During World War II, medical research concerning aircrew was directed by the Flying Personnel Research Committee in liaison with the physiology departments of Melbourne and Sydney Universities. Working independently and without knowledge of similar research being undertaken abroad, Prof Frank Cotton of Sydney University produced an air-inflated anti-G suit. On a visit to The USA in 1942, he found that the US Navy had been working on the problem. Cotton's design was made available to the Americans, and in 1944, a simplified version was being worn by US fighter pilots in the SW Pacific.

The introduction of high-altitude jet fighters to the RAAF led to the establishment of the School of Aviation Medicine at Pt Cook in 1956. The school contained a hypobaric chamber used both for the training of aircrew and for experimental purposes. The school became the RAAF Institute of Aviation

Medicine in 1960, in association with the University of Adelaide.

Aviation Medicine Institute personnel were involved as medical monitors in the NASA Mercury project. RAAF Reservist Ophthalmologist Dr John Colvin designed special sunglasses for the Gemini 5 mission. RAAF Reserve medical officers have made significant contributions to the 5 Eyes Air Force Interoperability Council since 1964.

This brief review can only highlight some of the important developments of a dynamic and innovative Air Force health service and its people. At the start of its second 100 years, the RAAF Medical Branch is the inheritor of the compassion, skill, courage and selfless commitment of all personnel who have come before. This legacy will inform the Branch as it provides care for aviators now and into the future.

Then, Now, Always.

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**Guest Editorial**