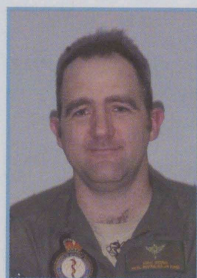


The ADF Aviation Medical Officers (AVMO) Course

SQNLDR Adam Storey Chief Instructor



SQNLDR Adam Storey graduated MB BS (Hons) from the University of Queensland in 2000 and completed his residency years in Brisbane before joining the RAAF. He has been based at RAAF Tindal and Amberley and is currently the Chief Instructor in AVMED at RAAF Edinburgh. He holds a Bachelor of Science and a Diploma in Aviation Medicine.

The RAAF Institute of Aviation Medicine (AVMED) at RAAF Base Edinburgh has a primary responsibility to provide training to a range of ADF health specialist officers with the necessary knowledge and skills to assess and manage the health of ADF aircrew and aviation personnel. In addition, health specialists can also provide informed advice to command on aviation medicine topics and thus provide integrated aviation medical support to ADF flying operations. Aviation medical support is thus a vital ADF capability forming a cornerstone of maintaining a healthy force of aircrew.

Courses offered by AVMED to ADF health specialists include the biannual Aviation Nursing Officer (AVNO) course, the normally biennial Aviation Dental Officers (AVDO) course and the flagship course for Aviation Medical Officers (AVMO). The AVMO course is of five weeks duration and is open to all ADF medical officers in both the full-time and reserve forces, including Specialist Reservist members. This course aims to provide intensive training in human physiology, psychology and human factors in aviation. This course also includes core elements covering deployed aviation medicine support to operations in the three Services as well as aircraft accident response and investigation. In addition to graduating students qualified as ADF AVMOs, this course also qualifies graduates as certified Designated Aviation Medical Examiners (DAME) with the Civil Aviation Safety Authority (CASA). This enables them to provide comprehensive medical care to civilian aircrew.

Many components on the AVMO course are taught by RAAF Specialist Reserve consultants, many of whom have previously attended the same course as students. AVMED often uses these

same experts for specialist opinion in support of decisions for fitness to fly in complex clinical cases for ADF aircrew.

Practical evolutions form an integral part of the AVMO course and include hypobaric chamber and hypoxia awareness training, experience with night vision goggles (NVG) and the NVG terrain board and spatial disorientation demonstrations in AVMED's integrated physiological trainer. This course also includes a remote sea survival and rescue training exercise near Adelaide, where students are dropped into the sea with standard aircraft survival aids to facilitate some familiarity with survival at sea and available survival aids. At its conclusion the course participants and selected ADF aircrew are winched from the sea utilising Navy or Army helicopters. The final practical exposure is that students are afforded actual high performance flight experience with specific PC-9 sorties, to facilitate individual experience of the stressors of flight within the aerospace environment and to demonstrate illusions of flight and the effects of spatial disorientation and motion sickness in the air.

To honour the legacy of the late Lieutenant George Merz¹, who was the first ADF Aviation Medical Officer, the Lt. George P Merz Prize is awarded jointly by AVMED and the Australasian Society for Aerospace Medicine (ASAM) to the dux of each AVMO Course. Merz was a young Melbourne doctor who



Fig 1: FLTLT Merz in a box kite

enlisted with the Australian Flying Corps (AFC) during World War One and participated in the first flying course at Central Flying School at Point Cook. Despite being neither the first to fly solo, nor the first to gain his 'wings', he did graduate as Dux of his course. Subsequently Merz was deployed to the Middle East in 1915 and during his deployment as part of the Mesopotamian Half-Flight, he flew reconnaissance missions from Asmara in support of the allied offensive on Baghdad. However later that year Merz was killed whilst flying a mission to Basra. Merz left a great legacy to ADF Aviation Medicine: he was not only the first ADF AVMO but also the first AFC airman to die in wartime service.

The importance of aviation medical support to aerospace operations has meant an increasing demand for trained AVMOs in support of ADF deployments. These represent a significant component of current ADF operations abroad. In order to enhance provision of a competent aviation medical support capability to ADF, AVMED hosted the inaugural AVMO Refresher Course in August 2009. The course is a one week intensive course. It is aimed at practicing AVMO's who wish to refresh their theoretical knowledge in aviation medicine and update their experience with current and future trends in aircraft, life support technology and clinical management of ADF aircrew.

Following the success of that course, AVMED plans to introduce a similar one week familiarisation course in aviation medicine for ADF Specialist Reserve members in 2010 or 2011. Whilst this course will not graduate students as AVMOs, it is aimed at ADF Specialist Reservists who are keen to gain an understanding of aviation medicine in support to ADF aerospace operations.

References

1. Smart, TL. Remembering Lieutenant Merz: Australia's military aviation medical officer pioneer. *Journal of the Australasian Society of Aerospace Medicine* 2005; 2 (1): 9-15.



Fig 2: Survival at sea exercise



Fig 3: PC-9 sortie



Fig 4: AVMED chamber exercise