

AVIATION MEDICINE —

WHERE THE SKY'S NOT THE LIMIT

Dr Jarnail Singh has been Chairman of the Civil Aviation Medical Board (CAMB), Civil Aviation Authority of Singapore (CAAS) since his appointment in 1997. He is also the current Chairman of the Aviation Medicine Subspecialty Training Committee and the immediate past president of the Society of Aviation Medicine Singapore. He has dual specialist accreditations in aviation medicine and occupational medicine and holds an MSc (Occupational Medicine) from the National University of Singapore and a Diploma in Aviation Medicine awarded by the Faculty of Occupational Medicine, Royal College of Physicians (London).

Dr Singh spent his formative years as a military flight surgeon in the Republic of Singapore Air Force (RSAF). He is internationally renowned for his many achievements in aviation medicine. He was instrumental in coordinating and implementing an International Civil Aviation Organization (ICAO)-led Anti-SARS project in 2003, for the affected States' aviation sectors. He also spearheaded and led ICAO's global project on Cooperative Arrangement for the Prevention of

Spread of Communicable disease through Air travel (CAPSCA) in the Asia-Pacific, Africa, the Americas and the Middle East. He is among the world's leading experts in fatigue management and crew-rest in aviators. Additionally, Dr Singh chaired the CAAS Ultra Long Range (ULR) Task Force, which enabled the world's first non-stop ULR commercial flight from Singapore to New York on 28 June 2004.

For his outstanding contributions to international aerospace medicine, Dr Singh was honoured with the 2011 Won Chuel Kay Award by the Aerospace Medical Association and the Public Administration Medal (Silver) for this year's National Day Awards. He assumed the appointment of President, International Academy of Aviation and Space Medicine in September 2015.

Dr Jarnail Singh (JS) shares his vision for aviation medicine with Dr Gan Wee Hoe, president of the Society of Aviation Medicine Singapore.



Dr Singh, please share with us a little about your growing up years. What made you decide to pursue medicine and later aviation medicine?

JS: The pursuit of medicine, in a way, came naturally — I was not too good in maths and physics, and during my time you either became an engineer or a doctor; thus the choice was obvious. I was posted to Tengah and Sembawang Air Bases as a National Service doctor and the rest, as they say, is history.

What were some of your most memorable moments as a military flight surgeon in the RSAF?

JS: The development and build-up of the RSAF Aeromedical Centre — from the building of infrastructure to the installation of the aeromedical training equipment and clinical facilities — would top the list. I remember using a video of myself losing consciousness in a training centrifuge in the US to justify for the human centrifuge. At the end of the presentation, the then Minister for Defence asked just one question: "Where are you going to site it?".



Aviation mishaps have been in the spotlight, especially in the last two years. Moving forward, how do you think aviation medicine can contribute towards the enhancement of aviation safety standards, in the area of human factors?

JS: Human factors have contributed to almost 80% of aviation mishaps for a few decades now. Humans have become the weak link in the entire safety chain. The aviation medicine specialist, equipped with both aviation knowledge and medical know-how, is ideally placed to contribute to both the understanding of aviation safety and intervention in this arena.

The global transmission of diseases such as the Ebola virus disease and the Middle East Respiratory Syndrome (MERS) constantly threatens Singapore due to our high interconnectivity with the rest of the world through air travel. In your opinion, what else must we do to enhance our resilience in preventing and mitigating against these communicable diseases?

JS: As a major aviation hub, we must recognise that air travel is the

main mode of global transmission of communicable diseases. As such, the aviation sector must play a key role, alongside the public health sector, to put in place risk assessment matrices with the appropriate responses to mitigate the consequences of these public health threats. It has to be a "whole of society" approach apace with a "whole of government" approach.

Aviation medicine is the newest medical subspecialty in Singapore, having been formally recognised by the Ministry of Health's Specialists Accreditation Board in 2014. Being a relatively young specialty, how can the fraternity promote the awareness and standing of aviation medicine in Singapore?

JS: We play a key role in protecting the health and safety of the travelling public as well as ensuring the safety of our military aviators and allied workers in the aviation sector. The formal recognition of the specialty is evidence of the fact that the medical fraternity recognises this key role. It is incumbent upon us now to play that role even better to realise the full potential of this unique specialty.

PROFILE



INTERVIEW BY

DR GAN WEE HOE

Dr Gan Wee Hoe is the president of the Society of Aviation Medicine Singapore.

Legend

1. Assistance visit to HK Int Airport – for public health events
2. Then CPT(Dr) Jarnail Singh chairing a meeting with fellow medical staff at the RSAF Aeromedical Centre
3. Director – Generals of Civil Aviation Conference Macao 2012
4. Leading a panel discussion at the ICAO CAPSCA meeting
5. Won Chuel Kay Award, AsMA
6. In Bogota, Colombia.

Photos by Dr Jarnail Singh

What are the vision and mission of the International Academy of Aviation and Space Medicine (IAASM)? As the first Singaporean who will lead this international professional body, what are your thoughts on taking on this global leadership position?

JS: The Academy was founded in 1955 with the objective of promoting and searching for new knowledge in aerospace medicine and contributing to international cooperation among those devoted to education and research in this particular field. Aviation and space medicine are the fields of medicine concerned with the maintenance of health, safety and performance of those involved in aviation or space activity (flight). It is an honour to be filling the shoes of eminent and famous people in the world of aviation medicine. I hope to fly Singapore's flag high, but I will need the support of the entire fraternity to do this.

Under your tenure, are there specific areas in aviation medicine and aviation safety that you will drive IAASM to focus on?

JS: Training of medical examiners, who are responsible for the medical assessments of pilots and air traffic controllers, has fallen behind the advancement of aviation expansion worldwide, especially in developing countries experiencing a boom in the aviation travel sector. This will be a key focus area.

Do you have any words of advice for younger doctors in training or those who hope to pursue aviation medicine?

JS: The specialty of aviation medicine is unique and very challenging in that it covers most of the other medical disciplines, as well as psychology in relation to the health, performance and safety of workers in a unique occupational setting. The specialty offers fulfilling, challenging and varied work experiences across military and civil aviation. You are not likely to be a millionaire, but you'll definitely enjoy the work! ♦

