

## Editorial

Aerospace Medicine is a multidimensional speciality. The core subjects remain basic physiology, acute altitude physiology, acceleration physiology and human factors. However, the subject has ramifications that extend into clinical medicine, ophthalmology, otorhinolaryngology, psychiatry, behavioural sciences, preventive medicine and pathology. It is a branch of occupational medicine, the hallmark of which is the safety of the pilot, his passengers, the aircraft, and success of the designated mission, all in an environment that does not support human physiology.

This issue mirrors the complex and heterogenous nature of aerospace medicine. There are two articles on acceleration physiology. The first provides us with an insight into the actual acceleration stresses experienced by fighter pilots flying three different types of fighter aircraft. Rates of onset, peak G levels as well as the duration of exposure to peak G as obtained from this study are important determinants which affect human cardiovascular physiology. In the other article the authors have shown how aerial combat manoeuvre will affect human tolerance to acceleration stress as simulated in a human centrifuge. There is a study on the light transmission characteristics of aircrew visors and goggles. Another study brings out the effects of oxygen breathing, as practised by helicopter aircrew flying at high altitudes, on the process of acclimatisation. There is an interesting case report on how the post mortem evidence of surgical emphysema in a fatal aircraft accident led to detection of the cause of the accident. A case report on analysis of an ejection injury emphasises the role of human engineering in ejection seat design vis-a-vis cockpit compatibility. Two reviews that are relevant to modern aviation are included, one on HIV and the aviator and another on the aeromedical aspects of high

altitude parachute operations. Aviation psychology is another fast emerging field of aerospace medicine with special emphasis on human factors, aircrew selection and behavioural patterns. The article on visuo spatial abilities of pilots discusses the role of computerised tests in detection of such abilities and their application in ab-initio pilot selection and trifurcation into the three streams of military flying. Another article provides us with an insight into some aspects of the behavioural patterns of Indian civil pilots. Finally, there is a study which will interest military administrators on the psychological aspects of airmen seeking premature discharge from service.

It is our constant endeavour to improve the quality and presentation of the journal. Some stylistic changes have been made in this issue. Readers are requested to provide all relevant material, including tables, figures, photographs and references when sending articles for publication.

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