

PRESIDENTIAL ADDRESS

41st Annual Conference, ISAM Indian Society of Aerospace Medicine



Air Marshal L.K. Verma

Dignitaries on the dais, distinguished guests, speakers, delegates, media, Ladies and Gentlemen,

It is indeed a matter of great privilege for me to deliver the Presidential Address of the 41st Annual Conference of the Indian Society of Aerospace Medicine. But, at the outset, I would like to extend a very warm welcome, on behalf of the Society as well as on my own behalf, to our Chief Guest - Air Chief Marshal Anil Yashwant Tipnis, PVSM, AVSM, VM, ADC, the Chief of Air Staff and Mrs Molina Tipnis, President, Air Force Wives Welfare Association. We are indeed honoured by their august presence. I would also like to extend a hearty welcome to Air Mshl JS Rai, PVSM, VM & Bar, AOC-in-C Training Command and Mrs Kamala Rai, President Air Force Wives Welfare Association (Regional), who have been always a source of strength to the organizing committee. I would like to welcome Lt Gen RK Jetley, VSM, the Director General of Armed Forces Medical Services, who is here and am thankful to my counter-parts in the Army and the Navy, Lt Gen Harcharan Singh and Surg Vice Adm HP Mukherjee, AVSM, VSM, that they have been able to spare some time from their busy schedule, to be a part of the deliberations of the conference. I would like to extend a big welcome to Dr Kasturirangan, Chairman ISRO who, shortly will be delivering the prestigious Air Marshal Subroto Mukerjee - Memorial Oration. My special thanks to the Director General Civil Aviation, Mr. HS Khola who consented to be here despite his busy schedule.

The Indian Society of Aerospace Medicine had a modest start in 1952 and over the last four decades has not only grown in size, but also in stature, so as to occupy a very prominent place in the field of Aerospace Medicine both on national and international platform. Members of our society have been interacting with their counterparts in different countries and have been regularly attending international conferences and meetings. Besides, a number of members have also contributed significantly to aerospace medicine and scientific activity, both nationally and internationally.

The aim of the society is to enable aircrew to work with their full potential and perform at an optimal level to accomplish their mission successfully and safely in an aviation environment, which is basically alien to the physiology of the human body. Therefore, it may be appreciated that the role of members of the society is important since its activities will have definite ramifications in the aviation scenario, be it civil or military. During the conference, we will be exposed to a number of such deliberations

and experiences from our members.

Function of the society is not only limited to scientific exploration study, but also maintenance of aircrew health, surveillance of health standards, prevention of accidents and incidents by monitoring psychological aspect of aviators and improving the social ethos. All these play a very important role in flight safety, and indeed are pivotal. I take this opportunity to reassure our chief guest - the members of the Air Staff that the medical officers of the Indian Air Force and the members of the society are doing their best, at flying stations and form a potent link in the chain of flight safety and aircrew health.

In the present day scenario, the practice of Aerospace Medicine is not only limited to the Indian Air Force and civil, but also to the army and navy. The army has its fledgling aviation arm while the navy's aviation forms an important part of the triple dimension maritime strike force. Both these have their own aeromedical problems peculiar to the environment in which they operate. Such issues are continuing to be addressed satisfactorily.

Members of the society have not only done research in aviation and associated fields but also done some conceptual thinking with regard to Disaster Management, Biomedical Engineering, Human Factors and its related areas. Society members have also digressed into other fields such as Hazardous Waste Management, solid waste disposal and have achieved results recognised both nationally and internationally. Because I believe, individual excellence must formulate to collective wisdom.

The Institute of Aerospace Medicine at Bangalore where this conference is being held, has been the nodal centre for development of Aerospace Medicine in India. We are thankful to the thrust given by the founders of the society that we are in the present shape. This Institute and the Society have a symbiotic relationship and have developed concurrently. I am glad to inform you that we are in the process of upgrading the facilities by acquiring a new human centrifuge and also some simulation facilities at this Institute. This will not only improve the quality of training but give thrust to research activities here. Areas such as enhanced Gz tolerance in the present and futuristic aircrafts, spatial disorientation and clinical aerospace medicine will get a tremendous boost with these new acquisitions.

The Society continuously receives the support from many agencies, like the Air Force authorities, the DGAFMS, Director General Civil Aviation, Airports Authority of India and many other scientific bodies. Our activities are also closely interlinked with that of the DRDO. Society's interaction with various aviation agencies are regular and complementary. I am happy that the Institute of Aerospace Medicine and the members of the aviation medicine community are in constant touch and dialogue with various agencies in furthering the scientific activities in the field of aerospace medicine.

Humans are now on the threshold of new era of the space activity and the concept of aerospace medicine has to be extended to physiological research in the void of space. This is important, to

so in view of the space activities which are taking place in India or are likely to take place in the future. Factors like micro-gravity effects on the cardiovascular system, muscles, bone, vestibular and other body systems will be important for space crew, while they are sent to explore the nearby planets and beyond. Opportunities in space are vast and with future scientific advancement, it is but natural that human beings will explore the final frontier and establish their presence. At this juncture I cannot help but quote a small poem from my own collection:

"Hurled a star in the sky
Climbed the moon, and went by
Looked at the earth,
Continents and oceans
Went in search of dimensions,
More we discovered more we found
Farther but remained the final frontiers."

In the 21st century, the practice of aerospace medicine has acquired a very important dimension in the overall activity of human beings. We have entered in the new millennium with a quantum leap and advancement in technology in aviation. The members of this society will be tasked in keeping the human physiology in a state of equilibrium, so that aviators will be able to perform to the best of their capability. This would involve an increased level of both psychological and physical tolerance, in ever-increasing stressful conditions. R & D efforts will have to continuously grapple with the final frontiers.

Our endeavour would always remain for dynamic progress in an everchanging scenario of aerospace medicine. It is not only important to recognize the limitations of human beings, but by research and application of scientific knowledge; to improve upon these physiological limitations, so that the human body and mind can function at a greater fervour. Our mind must continue to accept newer concepts, inputs and act upon it, because when one stops to perceive or acknowledge new ideas, one attains intellectual death. I am sure that all of us will benefit from the scientific deliberations of the conference.

JAI HIND