

## XXVI ANNUAL MEETING OF THE AERO MEDICAL SOCIETY OF INDIA

Inaugural Address

AIR MARSHAL LM KATRE PVSM AVSM & BAR CHAIRMAN HINDUSTAN AERONAUTICS (LTD)

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It gives me great pleasure to be with you all this morning at the annual meeting of the Aero Medical



Society of India. There have been tremendous advances in the field of aviation and space technology during the past 3 decades. Our country is now on the threshold of entering the space age with two

of our cosmonauts undergoing training in the USSR for the joint Indo-Soviet space Mission. The Aero Medical Society of India has entered into an important phase and is geared for a yet greater role in the years to come.

The advances in technology have tended to produce aircraft whose performance far exceeds human tolerance. However, it is the man who continues to be the main link in this man-machine complex. It has time and again been proved, even in space flights, that in spite of numerous aids and automation available to the crew, it is ultimately the man who has to use his judgment to successfully complete the mission in a complex and emergency situation. Flying produces various stresses on the human being. It is the role of the specialists in aviation medicine to determine the physiological and psychological stresses and devise ways to overcome them. They have to ensure that the human effort matches with the sophisticated machines, thus ensuring safety of operations and success of mission. Unless the link between man and machine is fully optimised, the success of the operation will remain limited. The aviators flying modern aircraft are becoming increasingly exposed to environments beyond the dynamic range of human physiology.

Aero Medical Specialists play an important role in the design and development of aircraft. The Institute of Aviation Medicine which is located in Bangalore has been the nerve centre of aero medical activities in this country. The association between HAL and IAM is over quarter of a century old. In fact the idea of locating IAM at Bangalore was that the aero medical specialists would work

in close collaboration with the engineers and designers at HAL. This interaction has grown fruitfully over the years and today the aero medical specialists play a vital role right from the drawing board-stage till the aircraft is cleared for service use. So far we have been getting aircraft from abroad, which had been designed to suit environmental conditions existing in the countries of origin. We have had problems, particularly in regard to the heat loads which our aircrew had to face in some of these aircraft, whilst operating in the summer at bases in Northern India. The other problem has been in relation to ergonomic and anthropometric limitations, We have so far been depending on the basic data as applicable to western aircrew. However, we now have the data for Indian aircrew and therefore we will be in a position to design cockpits suiting Indian population. I am glad to note that the Aero Medical Society of India has amongst its members eminent scientists and engineers representing various disciplines connected with aircraft design and operations.

Another vital area which has not been given its due importance so far in our country is the field of civil aviation medicine. I am glad to note that a symposium on civil aviation medicine forms a part of the scientific programme. The expertise and infrastructure available with the Air Force should be utilised by the civil aviation organisation, so that resources are not wasted in duplicating the facilities and research efforts.

During the two days of deliberation, you will be discussing various medical problems which have a direct bearing on aviation safety. I wish you every success. I am happy to see a large number of civilian medical consultants and scientists with us this morning. Their continuing interest in the work of the Society is a source of strength and pride for us.

I welcome Dr Srinivas, an eminent specialist in the field of neurology who has consented to deliver the Air Marshal Subroto Mukerji Memorial Oration. I am sure all of us will benefit from his deep knowledge.

I have now great pleasure in inaugurating the 26th Annual Meeting of the Society.

