XXVIII Annual Meeting

INAUGURAL ADDRESS

Air Marshal Vir Narain PVSM

Air Officer Commanding in Chief, Training Command, Indian Air Force

The Inaugural Address for this 28th Annual Meeting of Aero Medical Society of India, was to be delivered by Air Chief Marshal La Fontaine, Chief of the Air Staff. However, due to certain unavoidable reasons, it has not been possible for him to be with us today. I deem it a privilege that he has deputed me to take on this important task this morning.

In the nearly three decades during which the Aero Medical Society has been in existence, there has been phenomenal progress in aviation and space technology. With the induction of increasingly complex and sophisticated aircraft and weapon systems, the progress has been no less spectacular. These developments have been placing greater and greater demands on the aircrew physically, mentally and psychologically - sometimes very close to the known limits of human capability.

It is the task of Aviation Medicine to ensure that aircrew are physically and mentally equal to the demands of high performance aircraft and weapon systems with sufficient residual capacity to handle emergencies and operational stress. This is a challenging and difficult task. It involves an understanding of the complex interaction between man, machine and environment with focus on the most complex, sophisticated, delicate and valuable element of this triad - man himself.

The difficulty of this enterprise is symbolised by the pilot in the cockpit of a high performance single seat fighter specially as far as man-machine interface is concerned. Apart from the physical stresses generated by highly manoeuvrable aircraft, enormous amount of information is also generated in the cockpit placing an almost impossible burden on the attention span and alertness of the pilot. Can the pilot cope with this plethora of inputs, especially in a stressful combat situation? Can we reorganise the cockpit to make sure that he can? Presently we are involved in designing newer aircraft, and the Aviation Medicine specialist will have to advise on these aspects and many more. This may need greater stress on behavioural, psychological and human engineering aspects. I am happy to note that a special symposium will be held on this subject during the scientific session.

To succeed in his task of dealing with the man-machine-environment interface the Aviation Medicine specialist requires ability to predict, monitor, evaluate and analyse human performance. Fortunately, progress in electronics and medical technology has placed in the hands of the specialist diagnostic tools and monitoring equipment of enormous range and power. It is encouraging to know that our Institute of Aviation Medicine has got a good range of equipment for this purpose, but undoubtedly there is a great deal more that we could usefully acquire.

As far as Space is concerned, the experience gained by IAM in the joint Indo-Soviet Manned Space Programme has not only instilled greater confidence among our Specialists but also helped us to acquire some very sophisticated equipment for advanced work. It was my good fortune to be associated with the early stage of Project PAVAN in the Soviet Union, and I was most encourage to see the high regard in which ou Aviation Medicine Specialists were hel by the scientific community in th USSR. I have no doubt that their parti cipation in the ISRO-NASA Space Projec to be launched later this year wil bring them further credit.

I am sure your deliberations during the next two days will cover fresh grounds in the area of Aviation and Space Medicine. I welcome the Civilian Medical Consultants who will also be taking part in these deliberations. I specially welcome Dr.Madan Mohan, the eminent Eye Specialist who will deliver the Air Marshal Subroto Mukherjee Oration today. In conclusion, I would like to convey to you the greetings and good wishes of the Chief of Air Staff. I now have great pleasure in inaugurating the 28th Annual Meeting of the Aero Medical Society of India.