

INSTITUTE DISTINCTIVENESS

IAM is a premiere Institute offering post graduate MD Aerospace Medicine in India and the whole of South-East Asia. Aerospace medicine is a unique field with a very specific occupational orientation. The Institute possesses the state-of-the-art simulators which are the best in the world. The objective of the Institute is to impart training to the post graduate residents with highest standards of education. This is with an aim to produce world class specialists and groom the budding specialists in this field to assume role of a military/ civil aviation medical practitioner. This role by the specialist officer of Indian Armed Forces is in consonance with improvement of human performance and aerospace safety. In addition to training, the Institute is the hub of Aerospace Medicine activity in India involving both Civil Aviation and Military aviation sectors. The Institute also provides consultancy on aeromedical issues to various PSU and DRDO labs.

IAM, IAF is the primary agency contributing towards crew selection, training, research and other related activities involved in the Human Space Programme (HSP). The Gaganyaan Mission is a national programme with a goal to achieve an Indian space crew in space. This would make India the fourth such nation in the world.

IAM has been extending its support to ISRO in successful completion of this mission. One of the major roles included selection of the aircrew. Selection of the Astronauts was completed at IAM in 2019 and their subsequent mission specific training and evaluation is an ongoing process which is being done by the Institute. A pre-requisite for conducting any kind of training is the development of training protocols which was also done by IAM in the form of preparing aero-medical training précis. Another thrust area IAM has been diligently working towards is space related research in various departments of the Institute.

IAM is also involved in the development of human safety standards and tolerance limits during all phases of the space flight and this task has been flagged by ISRO as critical to the design of the rocket, the abort system, the crew module and the re-entry parameters.

Another cardinal role of IAM is providing Flight Surgeon support to the mission and this task vertical includes all aspects of selection of the Flight Surgeons, their training/ indoctrination and assignment to the space crew. The facilities required for evaluation and rehabilitation of the Space Crew after the recovery of the crew module in nominal and off nominal missions is

also the responsibility of the flight surgeon and ground medical crew and this is also being catered to by IAM. The Flight Surgeon would be the primary contact of the Space Crew during all phases of the space flight and therefore, the Institute is also involved in providing inputs to ISRO for the development of Pre-launch and Post-recovery facilities of Space Crew.

In addition, IAM is involved in providing aero-medical consultation to ISRO towards development of design, contents and acceptance requirements for the Crew Medical Kit, Human Use Products, Human System integration in the Crew Module, In-flight Health Monitoring, Human Engineering aspects in Crew Module Design, Sustenance of Human Life in Space and Health Maintenance of the Space crew.

IAM is expected to provide domain knowledge consultancy on the testing requirements and qualification thereof in all products and equipment affecting human passenger. Institute is also involved in providing consultancy towards the certification of all human related systems.