

**25 Aug 17 (Friday)**

**0900 - 1100h: Plenary Session**

**0900h - Arrival of Chief Guest**

**0905h - Welcome Address**

*Air Cmde Narinder Taneja VSM*

**0915h - Presidential Address**

*Air Mshl Pawan Kapoor VSM BAR PHS*

*DGMS (Air) & President ISAM*

**0930h - Inaugural Address by Chief Guest**

*Air Chief Marshal Birender Singh Dhanoa PVSM AVSM YSM VM ADC*

*Chief of the Air Staff, Indian Air Force*

**1000h - Air Marshal Subroto Mukerjee Oration**

*Managing Human Errors in Complex Systems - Dr Scott A Shappell*

**Chairperson:** Lt Gen MK Unni PVSM AVSM VSM PHS

*DGAFMS & Sr Col Comdt*

**1055h - Inauguration of Scientific Exhibition**

*Mrs Kamalpreet Dhanoa, President AFWWA*

**1100-1130h Tea (The Court)**

**1130-1230h Scientific Session I - Operational Effectiveness: We Care**

**Chairpersons:** Lt Gen Bipin Puri VSM PHS & Air Cmde CS Thakur

*Polycythaemia in an Aviator: Aeromedical Considerations - Sqn Ldr Avinash BK  
Aeromedical Decision Making in an Aviator with Meningioma & Focal Epilepsy-  
Gp Capt MS Nataraja*

*Aeromedical Disposition of an incidentally detected Giant Cisterna Magna &  
Posterior Fossa Cyst: A Case Report - Wg Cdr A Bhayana*

*Outcome analysis of Operated PIVD cases in IAF - Maj MK Nayak*

**1130-1230h Scientific Session II - Make in India: Aviation Industry Perspective**

**Chairpersons:** Dr TM Kotresh Sc 'G' & Air Cmde S Bhargava

*Challenges in Development of OBOGS for LCA (Tejas) - Mr M Sankaraiah Sc 'G'*

*Design and Development of Personal Protective Clothing & Life Saving*

*Equipment for Armed Forces- Dr R Indu Shekar Sc 'F'*

*Dilution Demand Breathing Regulator with Improved Performance for Aircrew of Helicopters- Dr T Raghuram Sc 'F'*

*On-Board Oxygen Generation using high Performance Molecular Sieve- A Bhat Sc 'F'*

**1130- 1300h Poster Session I - Aeromedical Challenges in Fighter Flying**

*A Comparative Analysis of Heart Rate Response in Aircrew under G stress in Different Training Profiles in HPHC: A Retrospective Study- Maj MS Arya*

*Comparative Analysis of HR Responses in Aircrew under Simulated G Stress in differential Training Profiles: Ab-initio vs Operational & Operational vs Experienced - Maj Anshul Bhide*

*Comparative Analysis of HR Responses in Aircrew under Simulated G Stress in differential Training Profiles: Ab-initio vs Senior & Experienced vs Senior- Maj Parvez Kaleem*

*Comparative Analysis of HR Responses in Aircrew under Simulated G Stress in differential Training Profiles: Operational vs Senior- Dr Jyoti Sood*

*Comparative Analysis of HR Responses in Aircrew under Simulated G Stress in differential Training Profiles: Ab-initio vs Experienced- Dr Rahul Dev.*

*Cervicalgia in Fighter Pilot- Maj Soumen Mandal*

*Extensive G Measles: A Case Report - Sqn Ldr Rohith KP*

*CRM in a Fighter Cockpit- Wg Cdr Parul Goel*

*Retrospective analysis of Initial Medical Examination of Aircrew Applicants in the*

*Indian Air Force- Dr Chandan Kumar*

**1230-1330h Scientific Session III - Young Researchers: The Future of Aerospace Medicine**

**Chairpersons:** Air Mshl CK Ranjan AVSM VSM & Air Cmde Deepak Gaur AVSM

*Operational Use of Go No-Go Pills - Sqn Ldr S Dinakar*

*Data Interpretation System for Centrifuge (DISC) - Sqn Ldr V Raghunandan*

*Oculometric Parameters as a Tool to Assess Sleep Deprivation: An Empirical Study - Dr E Srihari*

*Cardiovascular Risk Estimation in Civil Aircrew: Where Do We Stand?*

*- Dr D Ghosh*

**1230-1330h Scientific Session IV - Flight Safety and Accident Analysis (Closed Door Session)**

**Chairpersons - AVM SC Banerjee**

*HFACS Analysis of 25 Mishaps: Lessons Learnt- Air Cmde A Agarwal*

*Aerospace Safety Review: 2016-17- Air Cmde DK Awasthi VSM*

**1330-1430h Lunch (The Court)**

**1430-1630h Poster Session II - Aeromedical Decisions**

*Functional Evaluation of Gen III NVG before Deployment at 20,000'-*

*Lt Col S Venkatesh*

*Traumatic Amputation of Terminal Phalanx- Aeromedical Consideration for Flying- Maj Ashok Warthe*

*Fatty Liver Disease: A fine grained analysis - Maj Jayadevan G*

*Case of Malaria: Afield - Sqn Ldr S Dinakar*

*Night Flying in Dark Phase of Moon: An Ominous Sign for Disaster- Maj K Dalpati*

*Sprengel Deformity: A Case Report- Dr G Ghosh*

*Aircrew with Unusual Neurological Disorder - Lt Col Thakur Nepal*

*Lower Cranial Nerve Schwannoma- Aeromedical Decision Making: A Case Report- Dr. Rahul Dev*

*Targeted Therapy for Leukemia: Silver Lining! - Lt Col DK Khukhar*

**1430-1530h Scientific Session V - Introspect, Assimilate & Innovate**

**Chairpersons:** Surg V Adm AA Pawar VSM & Air Cmde Narinder Taneja VSM

*Administering Vibration Stress Test on Aircrew: Introspection & Way Forward - Dr S Gaur Sc 'D'*

*Psychological Assessment of cases of Low Motivation to Fly: Introspection & Way Forward- S Chaturvedula Sc 'E'*

*Head Injury Assessment: Introspection & Way Forward - Kalpna Anand Sc 'D'*

*ECG Abnormalities: Introspection & Way Forward - Sqn Ldr Pushkar Pandey*

**1430-1530h Session VI - A Decade of Medical Evaluation Across Boarding Centers**

**Chairpersons:** Lt Gen Sanjiv Chopra VSM & Air Cmde A Agarwal

*Prevalence of Dry Eye Syndrome in Indian Pilots - Wg Cdr Sapna Raina*

*Retrospective analysis of Initial Medical Examination at IAM IAF between 2006 & 2015 - Gp Capt NV Manjunath*

*Aeromedical Evaluation Runs in HPHC from 2009 to 2016 - Maj P Gupta*

*Befriending Kinesiology: A Future Prospect - Maj Urmimala B*

**1530-1630h Scientific Session VII- Residents in Aerospace Medicine (RAM)**

**IAM Session: Musculoskeletal Disabilities**

**Chairpersons:** Lt Gen CS Narayanan VSM \*\*\* & Wg Cdr YS Dahiya

*Retrospective Analysis of Lower Limb Injuries in Military & Civil Aircrew - Dr G Ghosh*

*Introspection - Cases of Shoulder Dislocation - Dr Isha Sah*

*Retrospective Analysis of Upper Limb Injuries in Military & Civil Aircrew - Maj Y Milanjit Singha*

*Introspection: Outcome Analysis of Knee Injuries in IAF Aircrew - Maj AB Singh*

**1530-1630h Scientific Session VIII - Optimising Performance under Environmental Stress**

**Chairpersons:** Surg V Adm UK Sharma & Air Cmde VV Joshi

*Effect of Modafinil on +Gz Tolerance in healthy male aircrew - Dr B Sinha Sc 'E'*  
*Impact of Interventions during Dry & Humid Heat Stress: A study in the Thermal Chamber - Wg Cdr P Goswami*

*BP at Rest and after Exercise in Healthy Indian Males - Sqn Ldr C Yadav*

*Changes in Cognitive Attributes and Psychomotor Performance on Exposure to Heat & Humidity - Lt Col S Mishra*

**1630h - Tea**

**1945h- Banquet (At Sterling Mac)**

**26 Aug 17 (Saturday)**

**0830-0900h Speaking Poster Session I - Mind Matters**

**Moderator:** Gp Capt Rahul Pipraiya

*Relationship between Emotional Labour, Emotional Intelligence and Work Stress among Military Pilots - Ms R Baruah*

*The Feeling Side of Intelligence among IAF Fighter Pilots - S Chaturvedula Sc 'E'*

*The Influence of Mindfulness on Decision Making and Cognitive Rigidity among*

*Aircrew - Ms. A Gautam Sc 'D'*

*Optimizing Human Capital through Aptitude Testing: Indian Air Force - Dr G Kaur Sc 'E'*

**0900 - 1000h AVM Srinagesh Memorial Oration - Civil Aerospace Medicine in India - Air Cmde (Dr.) Harish Malik (Retd.)**

**Chairperson:** Air Mshl Pawan Kapoor VSM BAR PHS

**1000-1030h Tea (The Court)**

**1030-1100h Speaking Poster Session II: Applying Thought to Av Med**

**Moderator:** Surg Capt SS Mohapatra

*Design and Development of a Novel tDCS System for Performance Enhancement - Dr AS Aravind Sc 'F'*

*Rationalization of Medical Standards for Civil Aircrew: A Way Forward - Gp Capt S Sood*

*Incidentally Detected Metabolic Abnormalities: Do we need to ground them all? - Lt Col A Gupta*

HFACS Analysis of Ground Towing Incidents in the IAF - Wg Cdr MD Sharma

**1100-1200h Scientific Session IX: Aeromedical Training – International Perspective**  
**Chairpersons: Lt Gen Rajvir Singh VSM & Wg Cdr AVK Raju**

*A Perspective of Aeromedical Training of Flight Surgeons and Aircrew - USAF High Altitude Research - USAF*  
*Enroute Medical Care Training in USAF - USAF*  
*Aeromedical Training in the IAF- Gp Capt R Pipraiya*

**1200-1300h Scientific Session X - Challenging the Old: Preparing for a New World**  
**Chairpersons: AVM Sudhir Rai & Lt Col Khukhar**

*Renal Calculi: Am I Fit to Fly - Gp Capt P Renjhen*  
*Experiments in Training - Lt Col DK Khukhar*  
*Jugular Ectasia: Revisited - Gp Capt MS Nataraja*  
*Applying the new IV Disc Prolapse Classification on archived Lumbosacral MRI Films: An introspection - Wg Cdr RD Chauhan*

**1200-1300h Scientific Session XI - It's all about Oxygen**  
**Chairpersons: AVM RK Ranyal VSM & Wg Cdr MD Sharma**

*Role of HBOT in Sudden Onset Idiopathic SNHL: IAM Experience - Wg Cdr AVK Raju*  
*Modified Decompression Chamber Test for PJ Instructors/ CFF personnel - Surg Capt SG Swamy*  
*HBOT Prognosis of Osteoradionecrosis: An IAM Experience - Lt Col Neeraja*  
*HBOT - A Limb Saving Option in Diabetic Foot Ulcers, Infections & Non Healing Wounds - Dr Ajith Kumar*

**1300-1400h – Lunch (The Court)**

**1400-1600h Poster Session III - Pot Pourri**

*Pattern of Earliest Memories: Theoretical Appreciation for their Use in the Psycho Diagnostic Process- Kalpna Anand Sc 'D'*  
*Obesity: An Increasing Drift in the Indian Aviation Industry - Dr Ketan Pakhale*  
*Should We Terraform Our Moon- A Futuristic Concept!! - Lt Col SD Jhariya*  
*Functional Genomics in Aerospace Medicine- Dr Santhosh SR Sc 'E'*  
*Is Saturated Salt Solution Technique the New Way Forward for Cadaver Embalming- Sqn Ldr Akriti Kashyap*  
*My 60 days in the IAF ... & More- Flt Lt Manju Prabha*  
*Assessment of Safety Awareness and Practices amongst Service Personnel of IAF Base - Lt Col Omesh Nath*  
*Management of Large Maxillary Chronic Apical Cystic Bony Defect in an Aviator: Aeromedical Considerations - Gp Capt SK Kaushik*  
*Vertigo Management using Rotary-cum-Torsion Chair - Dr BN Pranesh Rao*  
*Pattern of inter-MEC Quality Control in IAF - Wg Cdr Ashwini Kumar*  
*Noise Measurement of Fighter Aircraft close to an Airbase - Prof Munna Khan*

**1400-1500h Scientific Session XII - Existing Practices under the Hammer**  
**Chairpersons: AVM MS Butola & Surg Capt SG Swamy**

*Aeromedical Decision Making Challenges in Commercial Flying: Are We in Tune with the Rest of the World? - Dr KN Rao*  
*Comprehensive Review of Anthropometric Process: USAF & IAF - Lt Col S Bharadwaj*  
*'Common' Cold or 'Sinister' Sinusitis in a Helicopter Pilot: A Case Report - Wg Cdr P Goel*  
*Laying Down Anthropometric Limitations for a Trainer Aircraft - Wg Cdr MD Sharma*

**1400-1500h Scientific Session XIII - Out of the Box Research Experiences**  
**Chairpersons: AVM RC Das & Gp Capt MS Nataraja**

*Assessment of Fatigue Risk among Naval Aircrew During Carrier Borne Fighter Operations: A Pilot Study - Surg Capt SS Mohapatra*  
*Evaluation of OPTALERT® Eagle Drowsiness Monitoring System - Lt Col P Biswal*  
*Eye scan Pattern Analysis: A comparison between Novice & Experienced Aircrew - Maj R Chaurasia*  
*A Retrospective Analysis of Post Ejection Aeromedical Evaluation at IAM - Maj G Rathi*

**1500-1600h Scientific Session XIV - Bridging the Gaps**  
**Chairpersons: AVM GS Sandhu VSM & Lt Col P Biswal**

*NVG Train the Trainer: Post Truth Experience - Gp Capt D Malik*  
*Comparison of Visual Performance of NVG Gen 2++ and NVG Gen 3 Under Various Illumination Conditions - Dr MSK Chaudary*  
*Inter & Intra Observer Variability in Anthropometric Measurements - Wg Cdr YS Dahiya*  
*Anthropometry in Indian Air Force: A Re-Look - Flt Lt Harshavardhan*

**1600-1700h - General Body Meeting of ISAM**

**1700h - Tea**

**2000 – 2230h Fellows' Night - By Invitation (The Court)**

**27 Aug 17 (Sunday)**

**0830 - 0850h - DGMS (Air) address to all Air Officers (Medical & Dental)**

**0855h - Group Photo (All IAF Medical Officers)**

**0900 - 1000h Guest Lecture**

*Managing Medical Errors in Health Care - Dr Scott A Shappell*  
**Chairperson: AVM MV Singh**

**1000-1030h - Tea (Lounge)**

**1030-1130h - Innovations in Healthcare Seminar**

**1130-1300h - SMOs Conference**

**1300-1430h - Lunch (The Court)**

**1430h - Departure**

**Note:**

1. Scientific Sessions with Golden Background (II, IV, VI, VIII, XI & XIII) will be at **Engineer Auditorium**.
2. All other Scientific Sessions will be held in the **Srinagesh Auditorium**.
3. Poster Sessions (green background) will be in **The Lounge**

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# PROGRAMME



## 56<sup>th</sup> Annual Conference

**25-27 Aug 17**

### Venue

**Institute of Aerospace Medicine  
Indian Air Force  
Vimanapura Post  
Bangalore – 560 017  
India**