

SCIENTIFIC PROGRAMME
63RD ANNUAL SCIENTIFIC CONFERENCE OF ISAM
05 DEC – 07 DEC 24

Day 1 (05 Dec 24, Thursday)			
0800 h Onwards – Registration of Delegates 0845 h: All Delegates to be Seated			
Time	Inaugural Session		
0900 – 1000 h	0900 h : Arrival of the Chief Guest at Srinagesh Auditorium, IAM 0901 – 0905 h: Audio-visual presentation on 63 rd Annual Conference of ISAM 0906 – 0912 h: Welcome address by Commandant, IAM 0913 – 0925 h: Presidential Address by DGMS (Air) 0926 – 0938 h: Inaugural Address by VCAS 0939 – 1000 h: Award Ceremony, Release of IJASM & Technical Mini Series, Exchange of Mementoes & Release of Book 'White Coats Blue Skies'		
1000 – 1100 h	<i>Air Marshal Subroto Mukerjee Memorial Oration</i> Orator: Dr VR Lalithambika, Professor of Practice, IIT Madras, Distinguished Scientist, Former Director DHSP, ISRO Topic: 'The Next Giant Leap: My Reflections on India's Human Spaceflight Programme' Chairperson: Air Mshl Rajesh Vaidya VSM, DGMS (Air)		
1100 - 1145 h	High Tea at 'The Court'		
	Srinagesh Auditorium		Engineer Auditorium
1145 - 1300 h	Scientific Session 1	Military Medicine – From the Flight Clinics	Scientific Session 2
			Residents in Aerospace Medicine (RAM Session-1)
	Chairpersons: Air Mshl MS Sridhar, Surg Capt PD Ayengar		Chairpersons: Gp Capt DK Khukhar, Gp Capt Stuti Mishra
	Vascular Injury in an Aircrew: Aeromedical Decision Making for Reflighting	Gp Capt Ranjan Sarkar	Aeromedical Decision Making in Case of Lead Splatter Injury Following Ejection
	Prevalence of Tolerance to Coriolis Stimulus at 25 RPM Among Non-Airsick Flight Cadets	Wg Cdr Ajay Kumar	Fitness For Commercial Airlines Flying in a Resolved Case of Non-Hodgkin Lymphoma: Aeromedical Risk Assessment & Disposal
	Is 24-Hour Ambulatory BP Monitoring (ABPM) Useful Tool for Screening of Latent Hypertension Among Obese Air Warriors?	Gp Capt NK Tripathy	A Rare Case of 'Congenital Anomaly of Kidney and Urinary Tract' in an Aviator: An Approach to Aeromedical Disposition – A Case Report
	A Retrospective Analysis of Motion Sickness Desensitization Therapy at Institute of Aerospace Medicine and Way Forward	Surg Lt Cdr Karthikeyan	Aeromedical Decision Making in Cases of Thumb Amputation
	Acute Pain Management in Aircraft Accident: Roadmap to New Approach and Modalities	Wg Cdr Ashu Chandra	'Hypertension in Young' in Military Aircrew: A Case Series with Aeromedical Deliberations
			Sqn Ldr Gaurav Garg

1300 – 1400 h	Scientific Session 3	Fit to Fly: Evaluating Pilot Fitness for Aviation Safety	Scientific Session 4	Civil Aviation Symposium – Safety in The Skies
	Chairpersons: Lt Gen Sandeep Thareja SM VSM^{**}, Gp Capt SS Mohapatra		Chairpersons: Air Cmde Vipin Sharma, Gp Capt YS Dahiya	
	Hb Electrophoresis for Screening of Haemoglobinopathies in Military Aircrew at IAM IAF	Sqn Ldr Anubhav Upadhyay	Mental Health Evaluation – an AME’s Perspective	Dr Punita Masrani
	Post LASIK Criteria Dilemma: Mydriatic Eye Drops and Corneal Thickness Changes in Aspirational Candidates	Wg Cdr Atul Kumar Singh	Indian Perspective on Pilot Peer Support Group and Safety Initiatives in Airline Operations	Col (Dr) Rohit R Kochhar (Retd)
	Correlation Study of Ocular Axial Parameters with Height Among Emmetropic Candidates Appearing for Medical Evaluation	Wg Cdr Sridhara Reddy	Innovations in Medical Management of Inflight Medical Emergencies	Col (Dr) S Sodhi (Retd)
	Emergence of Lifestyle Diseases in Aircrew Post Initial Non-Related Medical Evaluations at IAF Boarding Centre: Retrospective Analysis	Wg Cdr Snehangsh	Setting Up Benchmark Process and Procedure in Safety Regulation: Challenges and Considerations of Reinstating a Commercial Trainee Pilot After Cannabis Use	Dr Archana R Ghai
	Poster Session 1 (Venue: ‘Anteroom’)			
	Aeromedical Challenges in Flying Exercises Overseas			Wg Cdr Sneha Dinakar
	Field Studies on Heat Stress in Low-Level High-Speed Flying & Pre Take-off Phase in Modern Fighter Aircraft and Fighter Trainer Aircraft: Is ‘FITS’ The Right Guide?			Gp Capt Pallavi Goswami
	Aeromedical Concerns: Dry Eye Disease and Prolonged Flight Hours in Civil Pilots			Wg Cdr Atul Kumar Singh
Disinfection & Disinsection of IAF Aircrafts: The Need of an SOP			Sqn Ldr Mohin M Sakre	
Comparative Study of Functional Outcome of USG Guided Single Injection of Platelet Rich Plasma v/s Corticosteroid in Treatment of Supraspinatus Tendinosis or Partial Supraspinatus Tear			Sqn Ldr Mainak Chandra Das	
Aftermath of Introduction of Drug Testing Policy in Civil Aviation: A Case Report			Surg Lt Cdr B Vinod	
Aeromedical to Clinical Perspectives: Is LCMS an Enigma?			Wg Cdr Ashwini Kumar	
Evaluation of Night Vision Goggle Fitted with Indigenised Image Intensifier Tube			Wg Cdr Polash Sannigrahi	
1400 - 1500 h	Lunch at ‘The Court’			
1500 – 1600 h	Scientific Session 5	Operational Aerospace Medicine: Where Medicine Meets Aviation	Scientific Session 6	Physiology: Back to Basics
	Chairpersons: Maj Gen VV Joshi VSM, Gp Capt MPS Marwaha		Chairpersons: Air Cmde P Ghana VSM, Gp Capt MS Nataraja	
	Preliminary Assessment for Aviation Personnel to Understand Fatigue Onset Through Neuropsychological Assessment and Biomedical Signal Analysis	Dr Viren Sardana	Physiological Parameters as Markers of Acute Stress During Simulator Flying- Possible Application to Improve Flying Training	Lt Col Srinivasa Bhattachar
	Continuous Wakefulness Study to Identify Potential Biomarkers of Sleep Deprivation	Dr Santhosh SR	A Comparative Study of Postural Stability Between Healthy IAF Aircrew and Groundcrew Using Computerized Dynamic Posturography (CDP)	Wg Cdr Yujvender Singh Thakur
	Military Aircraft Accident Investigation: A Case of Wet Drowning	Wg Cdr KK Singh	Hypoxia Hangover Following Exposure to Simulated Hypobaric Hypoxia	Wg Cdr Deepan Rai
‘Overall’ Modification	Lt Col Urmimala B	Determinants of Vitamin D Levels in Healthy Aircrew Visiting a Medical Evaluation Facility: The Influence of Diet, Latitude, Physical Activity and Gender	Wg Cdr Neha Gupta	

Poster Session 2 (Venue: Anteroom)				
	Aero-Toxic Syndrome Among Aircrew in Fighter Stream of IAF			Sqn Ldr Mayuri Verma
	Effect of Lifestyle Factors & Genetic Predisposition on Development of HASH in Armed Forces Personnel			Sqn Ldr Devdeep Ghosh
	Role of Gynaecologists in Combat Medical Care			Gp Capt Shahla Yazdani
	Use of Mefloquine for Aircrew: An Evaluation of Efficacy and Safety Compared to Alternative Therapies			Wg Cdr V Raghunandan
	Unexplained Cerebellar Stroke in a Young Aviator: Presentation and Aeromedical Implications			Wg Cdr Snehangsh
	Aeromedical Decision Making in a Case of Asymptomatic Myocardial Bridge: Stressors, Challenges and Approach			Lt Col Manu N
	Correlates of Aircrew Selection Parameters Using 3D Scanner in Comparison to Manual Anthropometric Limits			Sabyasachi Nayak
1930 h	Conference Dinner at 'Sterlings Mac Hotel'			
Day 2 (06 Dec 24, Friday)				
0830-0930 h	Scientific Session 7	Mind in the Cockpit: A Critical Component of Aviation Safety	Scientific Session 8	Residents in Aerospace Medicine (RAM Session-2)
	Chairpersons: AVM Kaushik Chatterjee, Dr CHN Sowgandhi		Chairpersons: Gp Capt Mona Dahiya, Gp Capt Seema Gambhir	
	Trait Anxiety: Neural Correlates and Possible Implications in Aviation	Shilpi Modi	Effectiveness of AI Based Large Language Model-Chat Gpt 4o in Aeromedical Decision Making vis-a-vis Clinical Decision Making	Dr Gokul Harish M
	Echoing Personality Through Paralanguage: An Exploratory Study	Sibin Raj K	Effectiveness of AI Based Large Language Model-Chat Gpt 4o in Clinical Medical Decision Making in Comparison to Older Model Chat Gpt 3.5 (Medflix)	Dr Sneha Kahalekar
	A Novel Approach to Air Sickness Desensitisation for cases of Intractable Air Sickness	Wg Cdr Ajay Kumar	Analysis of MRI Findings in Post Ejection Cases: A Retrospective Study	Sqn Ldr Uday Bansal
	A Case of Autism Spectrum Disorder (ASD) on Hyperbaric Oxygen Therapy (HBOT) Treatment	Wg Cdr Santosh TS	Poly-Trauma in Military Aircrew Aeromedical Decision Making During Reflighting	Sqn Ldr Varun Yenuga
	Poster Session 3 (Venue: Anteroom)			
	How Benign is 'Benign Essential Tremors'			Lt Col Urmimala B
	Optimizing Aeromedical Disposal for Hypertension in Fighter Aircrew: A Comprehensive Review			Sqn Ldr Krishnaveni
	Aeromedical Decision Making of a Military Aircrew with Tibial Varus Deformity After Repeated Stress Fractures			Sqn Ldr Shivaling
	Compressive Visual Field Defect: A Rare Case of Cavernoma in an Aircrew			Sqn Ldr Rahul Dev
	Effectiveness of Smartphone Oscope in Management of Ear Ailments at Primary Healthcare Level			Wg Cdr Shikha Gianchand
	Arthropod Vector Surveillance Using UAV Technology: Early Experiences from Pilot Project in Desert Terrain- Armed Forces Setting			Sqn Ldr VS Srikanth
	Lessons Learnt During a Pan India Exercise: Through the Eyes of an Young Medical Officer			Fit Lt Meera Dandge
0930 – 1000h	Tea at 'The Court'			
1000 – 1100h	<p align="center">AVM MM Srinagesh Memorial Oration</p> <p align="center">Orator: Wg Cdr (Dr) Kartik Kalyanram (Retd), Chief Co-ordinator, Rishi Valley Rural Health Centre Topic: 'Effective Healthcare Strategies for Low Resource Settings: Insights Gained from my IAF Journey'</p> <p align="center">Chairperson: Air Mshl (Dr) CK Ranjan AVSM VSM (Retd)</p>			

1100 - 1200 h	<p>JHF Manekshaw Panel</p> <p>Speaker 1: Dr SL Vaya, Life time Professor (Forensic Psychology), Rashtriya Raksha University Topic: 'Behavioural Forensic Clues: Way forward to connect the dots'</p> <p>Speaker 2: Dr Hanamantray Baluragi, Director, DHSP, ISRO Topic: 'Collaboration in Human Space Research'</p> <p>Chairpersons: AVM Anupam Agarwal VSM ACAS (Med), Air Cmde Rajesh Kumar</p>			
1200 – 1300 h	Scientific Session 9	Anthropometry: Science behind Crew Cockpit Compatibility	Scientific Session 10	Understanding Hypoxia & Hypobaria
	Chairpersons: Surg RAdm Vivek Hande, Gp Capt NK Tripathy		Chairpersons: Brig Amit Khurana, Gp Capt Ranjan Sarkar	
	Comparison and Standardisation of Measurement Protocol in 3D-Laser Whole Body Scanner for Anthropometric Parameters with Potential Application in Cockpit Ergonomics	Lt Col Binu Sekhar M	Decompression Chamber Test for Aircrew: Need for Customised Standardisation	Gp Capt DK Khukhar
	Comparative Analysis of Critical Anthropometric Parameters from the Anthropometric Data of 10 Year Duration (2015-24)	Wg Cdr Vasudev BN	To Study the Physiological Changes and Effect of Intermittent Mild Normobaric Hypoxia Exposure on Acclimation to High Altitude	Sqn Ldr G Harshavardhan
	Changes in Anthropometric Parameters Causing Rejection of Aircrew to Fly Trainer Aircraft	Surg Cdr Arjun Anchan	Accelerated Altitude Acclimatization and Hypobaric Hypoxia: A Proof-of-Concept Study from Rats to Humans	Dr Yasmin Ahmad
	The Functional Role of Individual Fingers in Hand Grip: Analysis and its Aeromedical Implications	Lt Col Srihari Iyer	Nine Step Tympanometry: Screening Tool for Eustachian Tube Dysfunctions	Flt Lt Neha Rao
	Poster Session 4 (Venue: Anteroom)			
	Need for Detailed Medical Policy for Crew of Remotely Piloted Aircraft System			Lt Col TS Rana
	Aeromedical Deliberations in Reflighting an Aircrew with Recurrent Shoulder Dislocation			: Flt Lt Saurav Chauhan
	Cruising to Success: Leveraging Body Composition Analysis for Aspiring Airmen			Dr Ketan Pakhale
	Analytical Cross-Sectional Study of UV Radiation- Related Eye Issues Among Personnel at an Airforce Station			Flt Lt Aman Arya
	Altitude Decompression Sickness: A Systematic Review			Dr Syed Lateef
	Visionary Warriors: Enhancing Career Opportunities Through Early Ophthalmological Evaluation			Sqn Ldr Robin Malik
Impact of Covid-19 Pandemic on Morbidity Pattern of Communicable Diseases: A Comparison of Indian Airforce and Indian Data			Sqn Ldr Avinash Kr Ray	
1300 - 1345 h	Lunch at 'The Court'			

1345 – 1445 h	Scientific Session 11	Space: New Horizons & Quest for New Solutions	Scientific Session 12	G-Tolerance: Aeromedical Stressors - Understanding the Core Issues
	Chairpersons: Maj Gen Dharmesh, Gp Capt P Biswal		Chairpersons: Col KK Sharma, Gp Capt Murtaza	
	Roadmap for 'IAM Spaceflight Aeromedical Certification Standards (ISACS)' and a Comparison with Existing Global Practices	Sqn Ldr Gaurab Ghosh	Effect of Selective Anti-Hypertensive Agents on Baroreflex Sensitivity and Relaxed +Gz Tolerance in Aircrew	Wg Cdr Biplab Bhowmick
	Astronaut Health Stabilization Programme: Roadmap for Gaganyaan Mission	Wg Cdr Polash Sannigrahi	High G Training Program with 'Push-Pull' Elements: A Review of IAF Experience	Wg Cdr Avinash BK
	Dynamics of Carotid Arterial Blood Flow During Simulated Microgravity and Lunar Gravity	Sqn Ldr Sourav Gain	Centrifuge Evaluation of Cases of Suspected Low G-Tolerance (2008-2024): An IAM Experience	Maj Sunil Kumar
Isokinetic Muscle Strength changes of Knee After 24 hrs Simulated Microgravity and Efficacy of a Standardized Exercise Protocol	Lt Col Savina O George	Operational Centrifuge Training of Fighter Aircrew: Two Cases of G Measles	Dr Shawn James	
1445 – 1545 h	Scientific Session 13	Free Papers	Scientific Session 14	Closed door session: Human Factors in Aviation
	Chairpersons: AVM Avinash Das, Col S Bhardwaj		Chairpersons: AVM SGS Datta, Surg Capt DK Kagti	
	Perception of Oral Health and Oral Health Related Quality of Life Assessment Amongst Aviators in Armed Forces	Col S K Kaushik	Aerospace Safety Review & Projects Underway to Enhance Safety	Gp Capt Asheesh Sharma
	Adjunctive use of Hyperbaric Oxygen Therapy (HBOT) in Non-Healing wounds – A South Indian Experience	Dr Ajith Kumar S	Assessment of Sleep and Fatigue Among Aircrew and Groundcrew During Sustained Operations	Gp Capt MS Nataraja
	Vestibular Schwannoma and Aviation Safety: Guidelines for Pilot with Fitness to Fly	Wg Cdr Jagadeeswaran VU	Fighter Aircraft Accident: HFACS-90 - Lessons to Learn	Gp Capt Murtaza
A Study on Comparative Efficacy of Three Types of Alcohol Breath Analyser Machines	Wg Cdr Parul Goel	Ejection Spinal Injury Pattern Analysis: An Evidence Based Explication	Sqn Ldr Devdeep Ghosh	
1545 – 1615 h	Tea			
1615 – 1730 h	ISAM General Body Meeting			
1915 h	ISAM Fellows' Night (Fellows only) at Vayu Vihar Officers' Mess, Challaghatta			
Day 3 (07 Dec 24, Saturday)				
0830 – 0900 h	Address by DGMS (Air) to all Air Officers (Medical & Dental) at Manekshaw Hall			
0905 h	Group Photograph (all IAF Medical & Dental Officers)			

	Srinagesh Auditorium		Engineer Auditorium	
0915 – 1100 h	SMOs' Conference		DGCA WORKSHOP FOR MEDICAL EXAMINERS (Timing 0830-1500 h)	
			Arrival of Medical Examiners	0830 h Onwards
			Registration	0830 – 0900 h
			Welcome Address by Gp Capt MS (CA)	0900 - 0915 h
1100 – 1130 h	Tea		Keynote Address (Timing 0915-0945 h) Quality of Medical by Medical Examiners: Impact on Flight Safety Speaker: Air Cmde Vipin Sharma Chairperson: Air Cmde P Ghana VSM	
1130 – 1230 h	Scientific Session: Final Words- Partnership for Progress Chairpersons: AVM Renuka Kunte, Air Cmde Mukul Bhatia		Tea followed by group photography (0945 - 1015 h)	
	Collaborative Research: Nuts and Bolts	AVM S Shankar	Session I Timing: 1015- 1200 h Chairperson: Gp Capt MB Suja	
	Innovation for Defence Excellence (iDEX)	Ms Kriti Taneja (Recorded talk)	Musculoskeletal Examination by Aeromedical Examiners	Gp Capt MS Nataraja
1230- 1400 h	Workshop on PALSS at 'The Lounge' and 'Anteroom'		Aviation Ophthalmology for Civil Aircrew	Wg Cdr AK Singh
			Aviation ENT for Civil Aircrew	Wg Cdr Jagadeeswaran VU
			Medical and Surgical Examination for Initial & Renewal Aircrew Licenses	Wg Cdr G Varadraj
			Lunch at 'The Court' (1200 - 1300 h)	
			Session II Timing: 1300 – 1400 h Chairperson: Gp Capt Mona Dahiya	
			A Talk by Representative of DGCA HQ	
			DGCA Medical Directorate: A Journey Through Time – 'Past Milestones, Present Challenges & Future Horizons in Aviation Medicine'	Gp Capt YS Dahiya
			Examination of Psychological Issues in Civil Aircrew Examination	Dr Ch N Sowgandhi

1400 h	Lunch at 'The Court'	Session III Timing: 1400 - 1500 h Chairperson: Gp Capt Murtaza	
		Errors in Medical Examination and Lessons Learnt	Sqn Ldr I Vijaya Vardhan
		Quiz Competition for DGCA Empanelled Medical Examiners	Sqn Ldr I Vijaya Vardhan
		Issues and Challenges Faced by Medical Assessors and Future Aspects: A DGCA Perspective	Gp Capt Murtaza
		Interactive session with Gp Capt MS (CA) & JDMS (CA)	
		Departure Formalities (1500 h)	