

# Aero India 2017- International Seminar

12 - 14 February 2017

**Venue: Royal Orchid Resorts & Convention Centre, Allalassandra,  
Bellary Road, Near Jakkur Flying Club, Yelahanka, Bangalore - 560065**

## Schedule of Presentations

Day 1	12 Feb 2017, Sunday	Event
	0900 – 1030 hrs	Inaugural Function
	1100 – 1200 hrs	Plenary Session-1
	1200 – 1300 hrs	Plenary Session-2
	1400 – 1530 hrs	Technical Sessions (Hall A,B,C)
	1600 – 1730 hrs	Technical Sessions (Hall A,B,C)
Day 2	13 Feb 2017, Monday	Event
	0900 – 1000 hrs	Plenary Session-3
	1000 – 1100 hrs	Plenary Session-4
	1130 – 1300 hrs	Technical Sessions (Hall A,B,C)
	1400 – 1530 hrs	Technical Sessions (Hall A,B,C)
	1600 – 1730 hrs	Technical Sessions (Hall A,B,C)
Day 3	14 Feb 2017, Tuesday	Event
	0900 – 1000 hrs	Technical Sessions (Hall A,B,C)
	1030 – 1200 hrs	Technical Sessions (Hall A,B,C)
	1300 – 1430 hrs	Technical Sessions (Hall A,B,C)
	1500 – 1530 hrs	Feedback Session

## TECHNICAL PROGRAMME

<b>DAY 1</b>			
<b>12<sup>th</sup> Feb 2017, Sunday</b>			
<b>9:00 - 10:30</b>	<b>INAUGURATION</b>		
<b>10:30 - 11:00</b>	<b>TEA</b>		
<b>11:00 – 12:00</b>	<b>Plenary Session-1</b>		
<b>Chair</b>			
Speaker	Dr V K Saraswat		
Organisation	President-AeSI, Member-NITI Aayog		
<b>12:00-13:00</b>	<b>Plenary Session-2</b>		
<b>Chair</b>			
Speaker	Mark Pearson		
Organisation	GE Aviation, USA		
<b>13:00-14:00</b>	<b>LUNCH</b>		
	<b>HALL A</b>	<b>HALL B</b>	<b>HALL C</b>
<b>Topic</b>	<b><i>Technology Collaboration - 1</i></b>	<b><i>Aircraft Systems - 1</i></b>	<b><i>C4ISR &amp; Avionics-1</i></b>
Chair			
<b>14:00 – 14:30</b>			
Speaker	Gautam Dutta	Comm. J. A. Maolankar, Dr. Amitabh Saraf, Capt. Shivnath Dahiya	Dr Ravindra Venugopal, Dr. Girish Nanjundaiah
Organisation	Siemens	ADA	OPAL-RT, USA
Title of the talk	<i>Technology Collaboration Aspects in Aerospace and Defence (AIS-2017-10)</i>	<i>Ski-jumping the Light Combat Aircraft (AIS-2017-62)</i>	<i>Development of Real Time System Avionics Integration Platforms (AIS-2017-03)</i>
<b>14:30 – 15:00</b>			
Speaker	Prof. R. V. Ravikrishna	Jonas Jakobsson	Arun Patel
Organisation	IISc	M/s SAAB, Sweden	Pulse Electronics, USA
Title of the talk	<i>National Center for Combustion Research &amp; Development – NCCRD: An Overview (AIS-2017-07)</i>	<i>Gripen: The Smart Fighter with Future-Proof Technology (AIS-2017-47)</i>	<i>Pulse’s Unique Transceiver Module Solutions for High Speed Data Communication in Avionics Systems (AIS-2017-06)</i>
<b>15:00 – 15:30</b>			
Speaker	Gp. Capt. R. Arvind	Dr. Vijay Kumar	Dr. Michael Brandfass
Organisation	IAF - ADA	HAL, Bengaluru	Airbus, Germany
Title of the talk	<i>Challenges and Opportunities for a Synergistic Civil – Military Aviation MRO Industry in India and Asset Management (AIS-2017-27)</i>	<i>Helicopters for Future – Indian Scenario (AIS-2017-08)</i>	<i>Advanced ISR Radar Technology for Manned and Unmanned Platform Applications (AIS-2017-16)</i>
<b>15:30 – 15:55</b>	<b>TEA</b>		

	<b>HALL A</b>	<b>HALL B</b>	<b>HALL C</b>
<b>Topic</b>	<b><i>Technology Collaboration-1</i></b>	<b><i>Aircraft Systems - 1</i></b>	<b><i>C4ISR &amp; Avionics – 1</i></b>
Chair			
<b>16:00 – 16:30</b>			
Speaker	Brigadier Sudhir Nagpal, Colonel VS Nat	Dr. K. Rajalakshmi Menon	Wg. Cdr. R. R. Senthil Kumar, Wg. Cdr. G. Kishore Raju
Organisation	Army Aviation	CABS	ASTE
Title of the talk	<i>Self reliance in Critical Technologies: User's Perspective (AIS-2017-04)</i>	<i>AWE&amp;C Flight Test (AIS-2017-05)</i>	<i>Utilization of COTS SDR for COMINT and Telemetry Application (AIS-2017-18)</i>
<b>16:30 – 17:00</b>			
Speaker	G. Ramakrishnan, L. Prakash Sai	Ashok Rangan, Manu Jain	D. Seshagiri
Organisation	ADA	ADE	LRDE
Title of the talk	<i>Importance of Performance Analysis of Design Outsourcing Relationship in Aerospace and Defence in India (AIS-2017-13)</i>	<i>Indian UAV: Past, Present and Future (AIS-2017-14)</i>	<i>Primary Radar for Airborne Early Warning and Control System (AIS-2017-15)</i>
<b>17:00 – 17:30</b>			
Speaker		Cmdr. Deepak Bansal, Cdr. Sanjay Bhattacharjee	Brigadier A. K. Suri, Colonel V. S. Yadav
Organisation		Naval Base , Kochi	Army Aviation
Title of the talk		<i>MRO Philosophies for Minimum Downtime of Fleet (AIS-2017-17)</i>	<i>Enhancement of Operational Capabilities in TBA: A Technological Challenge (AIS-2017-12)</i>

<b>DAY 2</b>			
<b>13<sup>th</sup> Feb 2017, Monday</b>			
<b>9:00 - 10:00</b>		<b>Plenary Session-3</b>	
Chair			
Speaker	<b>A S Kiran Kumar</b>		
Organisation	<b>Chairman-ISRO, Secretary-DOS</b>		
<b>10:00 – 11:00</b>		<b>Plenary Session-4</b>	
Chair			
Speaker	<b>Baba Kalyani</b>		
Organisation	<b>CMD-Bharat Forge</b>		
<b>11:00 – 11:25</b>		<b>Tea</b>	
	<b>HALL A</b>	<b>HALL B</b>	<b>HALL C</b>
<b>Topic</b>	<b><i>Evolving Scenarios – 1</i></b>	<b><i>Propulsion – 1</i></b>	<b><i>Aircraft Systems – 2</i></b>
<b>Chair</b>			
<b>11:30 – 12:00</b>			
Speaker	Conrad Banks	Dr Victor I Mileshin, Druzhinin Iaroslav, Zhdanov Vladislav, Kozhemyako Pavel	Ramaiah Kothapalli
Organisation	Rolls Royce, Bristol	CIAM, Russia	Honeywell Technologies, Bengaluru
Title of the talk	<i>Engine Power for The Future: Evolution or Revolution? (AIS-2017-22)</i>	<i>Methods of Unsteady Flow Control in Typical High Loaded HPC Stages with the Aim of Gas Dynamic Efficiency Improvement (AIS-2017-20)</i>	<i>Honeywell Aerospace Technologies - Current &amp; Future (AIS-2017-21)</i>
<b>12:00 – 12:30</b>			
Speaker	Gordin M. V, Yanovskiy L. S.	Gary Way	A. P. V. S. Prasad
Organisation	CIAM, Russia	Eurojet, Germany	ADE
Title of the talk	<i>Aviation Engines Based on Solid-Oxide Fuel Cells for Next-Generation Transport Aircrafts (AIS-2017-19)</i>	<i>Future Technologies for Combat Engines (AIS-2017-23)</i>	<i>Challenges in Design and Development of MALE UAV TAPAS – 201 (AIS-2017-24)</i>
<b>12:30 – 13:00</b>			
Speaker	Anoop G, Gargi Meharu Rajesh A. K.	BVA Patnaik, AN Viswanatha Rao	Andrey Marshankin
Organisation	HAL, Bengaluru	GTRE	United Aircraft Corporation, Russia
Title of the talk	<i>Conceptual Design of Amphibious Aircraft (AIS-2017-25)</i>	<i>Key Elements of Engine Health and Life Monitoring (AIS-2017-26)</i>	<i>(AIS-2017-51)</i>
<b>13:00-14:00</b>		<b>LUNCH</b>	

	<b>HALL A</b>	<b>HALL B</b>	<b>HALL C</b>
<b>Topic</b>	<b><i>Evolving Scenarios – 2 &amp; Technology Collaboration - 2</i></b>	<b><i>Aircraft Systems – 3 &amp; Technology Collaboration - 3</i></b>	<b><i>Aircraft Systems – 2</i></b>
<b>Chair</b>			
<b>14:00 – 14:30</b>			
<b>Speaker</b>	Gp. Capt. S. Rajput	Sudhir Kumar Mishra	Dr. Ramesh Sundaram
<b>Organisation</b>	CABS	BrahMos Aerospace	NAL
<b>Title of the talk</b>	<i>Artificial Intelligence in Aerospace – Emerging Trends (AIS-2017-65)</i>	<i>Technological Challenges in Realizing Air Version of BrahMos (AIS-2017-01)</i>	<i>Structural Health Monitoring of Aircraft Composite Structures: Issues and Challenges (AIS-2017-33)</i>
<b>14:30 – 15:00</b>			
<b>Speaker</b>	Alexander Troynin	Abhishek Dixit, Adarsh Kodhanda, Prof. S E Talole	Sanjay Saxena, S D Lagavankar, Kamesh Goyal
<b>Organisation</b>	United Aircraft Corporation, Russia	DIAT, Pune	RCMA, CEMILAC, Nasik
<b>Title of the talk</b>	<i>United Aircraft Corporation (UAC): New Opportunities - New Approaches to International Cooperation in the Field of After-Sales Support of Military Aircraft (AIS-2017-53)</i>	<i>Robust Consensus for Swarm of UAVs (AIS-2017-32)</i>	<i>Integration of Air Launched Missiles-Astra and BrahMos on Su-30 Mk I Aircraft (AIS-2017-30)</i>
<b>15:00 – 15:30</b>			
<b>Speaker</b>	Lt. Col. Punyashlok Biswal, Air Cmde Narinder Taneja, Wg. Cdr. Yashvir Singh Dahiya	Dr. S. K. Datta, Dr. Sudhir Kamath	Gp. Capt. G. Ananth, Jagdish Patange
<b>Organisation</b>	Institute of Aerospace Medicine (IAM)	MTRDC	ARDC, HAL
<b>Title of the talk</b>	<i>Aeromedical Support to the Aviation Industry: 60 Years of Evolution and a Roadmap to Future Collaboration - an IAM Perspective (AIS-2017-34)</i>	<i>Indian Initiatives in Microwave Tubes and Power Modules for Aerospace Applications (AIS-2017-35)</i>	<i>Improving Situational Awareness and Quality of Service using 3 Dimensional Audio Warning System (3 DAWS) (AIS-2017-64)</i>
<b>15:30 – 15:55</b>	<b>TEA</b>		

	<b>HALL A</b>	<b>HALL B</b>	<b>HALL C</b>
Topic	<b><i>C4ISR &amp; Avionics – 2</i></b>	<b><i>Aircraft Systems – 4</i></b>	<b><i>Materials &amp; Manufacturing – 1</i></b>
Chair			
<b>16:00 – 16:30</b>			
Speaker	Abhishek Singh, Souvik Kumar Das	Gp Capt P S Sarin	Dr V Sridhara
Organisation	HAL, Bengaluru	IAF	HAL, Bengaluru
Title of the talk	<i>Design &amp; Development of Indigenous Real Time Operating System for Airborne Computers (AIS-2017-37)</i>	<i>Aircraft Structure Integrity Programme for IAF (AIS-2017-02)</i>	<i>Additive Manufacturing of Parts for Indigenous Aero Engines (AIS-2017-39)</i>
<b>16:30 – 17:00</b>			
Speaker	Jyoti Gupta	Wg. Cdr. Vijay Panwar, Major Vinayak Sapkal	Rajnish Sharma
Organisation	HAL, Hyderabad	ASTE	BEL
Title of the talk	<i>MIMO-OFDM Systems for Airborne Tactical Communication (AIS-2017-69)</i>	<i>Development of Real Time Helicopter Handling Qualities Simulator (AIS-2017-38)</i>	<i>Quality Assurance in Aerospace (AIS-2017-42)</i>
<b>17:00 – 17:30</b>			
Speaker	P. Venkaiah, Ramesh Avala	Vikash Bhardwaj, Vivek Mairothia, K. K. Yadav	Dr. K. Gopinath, A. K. Gogia
Organisation	HAL, Hyderabad	ADRDE	DMRL
Title of the talk	<i>A Novel Approach to Design of a Squared Cosine Pulse Modulated Power Amplifier used for Airborne Navigation applications (AIS-2017-43)</i>	<i>Fail Safe Control Unit with Redundant Controller for Aerostat Application (AIS-2017-44)</i>	<i>Material Trends in Aircraft Engines (AIS-2017-63)</i>

<b>DAY 3</b>			
<b>14<sup>th</sup> Feb 2017, Tuesday</b>			
	<b>HALL A</b>	<b>HALL B</b>	<b>HALL C</b>
<b>Topic</b>	<b>Space and Missile Systems – 1 &amp; Technology Collaboration – 4</b>	<b>Aircraft Systems – 5</b>	<b>Technology Collaboration – 5</b>
<b>Chair</b>			
<b>09:00 - 09:30</b>			
Speaker	Dr. Alexander Prokhorov	Air Cmde. B. N. Kumar	Gp. Capt. Pawan Kumar Anand
Organisation	CIAM, Russia	IAF	IAF
Title of the talk	<i>Synergetic Aspects of Investigations and Provision for Testing Propulsion System for Space and Hypersonic Vehicles (AIS-2017-46)</i>	<i>MRO Philosophies for Reduction in Downtime of Fleet (AIS-2017-50)</i>	<i>Indigenous Product Development: Make in India (AIS-2017-66)</i>
<b>09:30 - 10:00</b>			
Speaker	Dr. V. Narayanan	Gunvanta Mate, Kumaraswamy N, Aruna Kumara H H	Wg. Cdr. M. A. Dubey
Organisation	LPSC	BEL, Bengaluru	IAF
Title of the talk	<i>Cryogenic Propulsion Systems for ISRO Launch Vehicles (AIS-2017-49)</i>	<i>On Board Processing for Improvement of Payloads Performance on LTA Platform (AIS-2017-29)</i>	<i>Indigenisation: Challenges &amp; Way Ahead for Indian Air Force (AIS-2017-36)</i>
<b>10:00-10:25</b>	<b>TEA</b>		
	<b>HALL A</b>	<b>HALL B</b>	<b>HALL C</b>
<b>Topic</b>	<b>Space and Missile Systems – 2, Technology Collaboration – 6 &amp; C4ISR &amp; Avionics – 3</b>	<b>Aircraft Systems – 5</b>	<b>Propulsion - 2</b>
<b>Chair</b>			
<b>10:30 - 11:00</b>			
Speaker	Lazar T Chitilappilly	Pradeep Mahuli & Prashant Singh Bhadoria, HAL	G Gouda
Organisation	VSSC	CEMILAC, Bengaluru	CEMILAC, Bengaluru
Title of the talk	<i>SCRAMJET Engine Technology Demonstration Flight using Low Cost Hypersonic Test Vehicle (AIS-2017-52)</i>	<i>Concurrent Certification in the Design &amp; Development of HTT 40 Basic Trainer Aircraft (AIS-2017-68)</i>	<i>Operability Issues Encountered in Military Gas Turbine Engines (AIS-2017-48)</i>
<b>11:00 - 11:30</b>			
Speaker	Gp. Capt. K. Giri	Naresh Kumar Agarwal, G. C. S. Negi, Navneel Neeraj	Lee Doherty
Organisation	IAF	HAL, Lucknow	Rolls Royce Plc, Bristol
Title of the talk	<i>Self Reliance in Defence Acquisition – a Contributor to the ‘Make in India’ Initiative (AIS-2017-56)</i>	<i>Aircraft Flight Control &amp; Utility Hydraulic Actuators: Design, Testing and Certification (AIS-2017-11)</i>	<i>Moving OEM Support Closure to the Operator-Service Delivery Center Concept (AIS-2017-28)</i>

<b>11:30 - 12:00</b>			
Speaker	P. Radhakrishna	Shaik Ismail, R Santhosh, Dr PC Jain, P S R Anjaneyulu	Shibin Charthakudath
Organisation	LRDE	DRDL	Siemens
Title of the talk	<i>Development of Active Electronically Scanned Array (AESA) Radar for Fighter Aircraft – An Indian Scenario (AIS-2017-09)</i>	<i>Comparative Study for the Criticality of Structural and Thermal Loads for Ceramic Radome (AIS-2017-41)</i>	<i>Jet Engine Development Challenges (AIS-2017-54)</i>
<b>12:00 - 13:00</b>			
<b>LUNCH</b>			
	<b>HALL A</b>	<b>HALL B</b>	<b>HALL C</b>
<b>Topic</b>	<b>Space and Missile Systems – 3</b>	<b>Aircraft Systems – 5</b>	<b>Materials &amp; Manufacturing – 2</b>
<b>Chair</b>			
<b>13:00 – 13:30</b>			
Speaker	Leonid S. Yanovskiy	Dangeti Srinivasa Rao	Dr D K Das, S Goul Laxmi, Md. Zafir Alam, D Sen, D S Rao
Organisation	CIAM, Russia	Honeywell Technologies, Bengaluru	DMRL
Title of the talk	<i>Issues of Endothermic Fuels usage in High Velocity Engines of Atmospheric Vehicles (AIS-2017-55)</i>	<i>Honeywell Technology Offering to Regional Aerospace Market (AIS-2017-59)</i>	<i>Development of Thermal Barrier Coating for Single Crystal Gas Turbine Engine Components at DMRL (AIS-2017-45)</i>
<b>13:30 - 14:00</b>			
Speaker	M Pandu Ranga Sarma, Arvind Kumar, AP Vardhan, Dr. B. S. S. Chandran	Dr. T. R. Rajanna, Jayashri M Teli, Ravikumar Kammela, Shashidhar Chavan P	Vikram Reddy
Organisation	DRDL	HAL, Bengaluru	GE, Bengaluru
Title of the talk	<i>Combustion Instability Studies in Solid Rocket Motors (AIS-2017-58)</i>	<i>Challenges in Navy Full Aircraft Structural Strength Testing (AIS-2017-67)</i>	<i>Introducing GE Additive: Growing a World with Limitless Potential (AIS-2017-60)</i>
<b>14:00 – 14:30</b>			
Speaker	Manoj R, Rolex Ranjith A, G Sai Krishna Prasad, Anil K Jaiswal, M Raghavendra Rao	R. Santhiseela, Himanshu S Palak	Vaman Kulkarni, Dr Niranjana Kalyandurg, Yathiraj Kasal
Organisation	DRDL	ADE	Honeywell Technologies, Bengaluru
Title of the talk	<i>Testing of Hydro Carbon Fuelled SCRAMJET Combustor (AIS-2017-61)</i>	<i>Knowledge-Based Systems Built using Generic Components Based Expert System Shell (AIS-2017-40)</i>	<i>Applications of Additive Manufacturing in Aerospace (AIS-2017-57)</i>
<b>14:30 – 14:55</b>	<b>TEA</b>		
<b>15:00 – 15:30</b>	<b>Feedback Session</b>		
<b>15:30-16:30</b>	<b>Air Show Ticket distribution</b>		