



First International Conference on
Advanced Air Mobility Systems



ICAAMS-1

A Joint Initiative

(VFS and RWSI)

IN COMMEMORATION OF THE
SILVER JUBILEE OF
ROTARY WING SOCIETY OF INDIA

Presenting

ICAAMS-1

Conference Program and Sponsorships

7-8 Dec 23

Indian Institute of Science

Bengaluru – India

Supported by





A joint initiative by Vertical Flight Society (VFS) International Asia Australia Region and Rotary Wing Society of India (RWSI) under support of VFS International (Australia Chapter)

It will pioneer a holistic forum on
Advanced Air Mobility System (AAMS)

The **I**nternational **C**onference on **A**dvanced **A**ir **M**obility **S**ystem
ICAAMS

The forum will address all subdisciplines of Aerospace and Aviation. Coverage is from design development to operations, product support, regulations and on to airspace management.

The Inaugural conference ICAAMS-1 has been limited to a single session format to enhance closer interaction during the two-day program.

The keynote presentations have been specifically designed to address four strategic issues and challenges of an AAMS

ICAAMS -1 is an opportunity to **Set-the-Scene** for the ICAAMS series of forums in the Asia Australia Region

So, join in as a delegate or sponsor to be part of it.

Organising Committee



7 Dec 23

Time	Activity	Presenter/Authors
0800-0815	Day 1 - Conference Introductory Briefing	Vijaya Kumar Mudubagilu, Dy Chair ICAAMS-1
0815-0830	Welcome Address to the Country, City and IISc	TBA
0830-0845	Conference Opening Address	Arvind Sinha, Chair ICAAMS 1
0845-0930	Keynote 1 – Technology Development Updates	Salim Zaheer – XTI Aircraft, USA
Session 1 – Airspace Management <i>Chair: TBA</i>		
0930-1000	Ongoing advances in technology and thought move towards finding solutions that work	AK Sachdev
1000-1030	UAM integration with existing airports	Amit Ganjoo , Brent Klavon & Sanuj Mittal
1030-1100	Tea/Coffee/Drinks Break	Sponsored by TBA
Session 2 – Airworthiness and Regulations <i>Chair: TBA</i>		
1100-1130	eVTOL Certification – Regulatory Approach and Safety Considerations	Sanjay Gattani
1130-1200	Development of Standardization Framework for UAV Airworthiness in Thailand	Sitthitharanon K, Tiandum J, Tantrairatn S, Pichitkul A, Mr Ariyarat A & Mr Pittayachaval P.
1200-1245	Meetings & Lunch	Sponsored by TBA
1245-1330	Keynote 2 – Safety Regulations Updates	Regulator - TBA
Session 3 – Design <i>Chair: JVR Prasad – Georgia Institute of Technology, USA</i>		
1330-1400	Evolution of Interchangeable Main Rotor Blades: An HAL Perspective	K Sravan Kumar, Vineeth Kumar C Dr KR Prashanth & Nagarajan R
1400-1430	Positioning of the Main Rotor Actuators for a helicopter with dynamic swash plate phasing	K Sravan Kumar, Vineeth Kumar C KR Prashanth & Nagarajan R
1430-1500	Design of a Versatile UAV for Emergency Medical Services (EMS)	C Rudraswamy, Sharath Ravi, Kshamith Alva K S N Omkar & Hemant Sharma
1500-1530	Tea/Coffee/Drinks Break	Sponsored by TBA
Session 4 – Product Support <i>Chair: TBA</i>		
1530-1600	A Review on the Development of a Blockchain Ecosystem for an Aviation MRO	Pranav S. Kaushik, Pranav Shankar, Aakif A. Pallimera & Siddhanth Subbaiah
1600-1630	Day 1 - Panel Discussions	Industry, Academia, Regulator & Independent
1630-1645	Vote of Thanks	Technical Chair
1645-1700	Day 1 – Closing Address	Vijaya Kumar Mudubagilu, Dy Chair ICAAMS-1
1930-2000	Keynote 3 - Advanced Air Mobility - Way Ahead	James Wang, <i>Nanyang University, Singapore</i>
2000-2200	Conference and RWSI Silver Jubilee Banquet and Awards	Sponsored by TBA

8 Dec 23

Time	Activity	Presenter/Authors
0800-0815	Day 2- Conference Introductory Briefing	Vijaya Kumar Mudubagilu, Dy Chair ICAAMS-1
0815-0845	VFS and RWSI Address	Executive Director VFS and President RWSI
0845-0930	Keynote 4 – Airspace Management Updates	Government - TBA
Session 5 – Systems <i>Chair: Lakshmi Sankar – Georgia Institute of Technology</i>		
0930-1000	Voice Activated system using Artificial Intelligence for Flying cars - Design manned	Rahul & Tittu George
1000-1030	Deep learning based Virtual Sensor for Low Airspeed Measurement	Rahul & Tittu George
1030-1100	Tea/Coffee/Drinks Break	Sponsored by TBA
Session 6 – Structures & Materials and Propulsion <i>Chair: Dineshkumar Harursampath – Indian Institute of Science</i>		
1100-1130	Use of Thermoplastics and Advanced Manufacturing Techniques for Low Weight Solution and High Tate Production of UAM eVTOLs	Evan Young & Sanjay Gattani
1130-1200	Hybrid Propulsion of a Cargo VTOL Aircraft	Richard P. Anderson & Jeffrey R. Lewis
1200-1245	Meetings and Lunch	Sponsored by TBA
1245-1330	Keynote 5 – Research and Innovation Updates	F Gandhi, <i>Rensselaer Polytechnic Institute, USA</i>
Session 7 – Aerodynamics 1 <i>Chair: Auraluck Pichitkul - Suranaree University of Technology, Thailand</i>		
1330-1400	Aerodynamic Effect of Rain on Quadrotor Performance	Aishwerya Gahlot & Lakshmi N. Sankar
1400-1430	Rotor Inflow Models for UAM Applications	J.V.R. Prasad, Jahnvi Hariani & David A. Peters
1430-1500	Stochastic Aeroelastic Stability of Distributed Electric Propulsion Wing	Senthil Murugan & Ms Snighdha
1500-1530	Tea/Coffee/Drinks Break	Sponsored by TBA
Session 8 – Aerodynamics 2 <i>Chair: Raman Singh, Monash University, Australia</i>		
1530-1600	Design and Analysis of Efficient Low Noise eVTOL Rotors	Auraluck Pichitkul & Lakshmi N. Sankar
1600-1630	Control Equivalent Turbulence Input Models for UAM Applications	J.V.R. Prasad & Mahmoud Hayajnh
1630-1700	Day 2 - Panel Discussions	Industry, Academia, Regulator & Independent
1700-1615	Vote of Thanks	Technical Chair
1715-1730	Conference Closing Address- Chair Handing Over	AK Sinha & VK Mudubagilu – Chairs ICAAMS

TBA: To be advised.



ICAAMS -1

Organising Team



Chair	: Arvind Sinha, <i>Melbourne University, Australia</i>
Deputy Chair	: Vijaya Kumar Mudubagilu, <i>Rotary Wing Society of India, India</i>
Technical Chair Aerospace	: Robert Hood, <i>Vertical Flight Society International, Australia</i>
Technical Chair Aviation	: BS Singh Deo, <i>Rotary Wing Society of India, India</i>
Executive Committee	: AS Butola, <i>Rotary Wing Society of India, India</i> : BS Singh Deo, <i>Rotary Wing Society of India, India</i> : Vijaya Kumar Mudubagilu, <i>Rotary Wing Society of India, India</i> : Arvind Sinha, <i>Vertical Flight Society International, Australia Chap</i> : Robert Hood, <i>Vertical Flight Society International, Australia Chap</i>
Industry Advisors	: V Sadagopan, <i>Former CEO, Helicopter Complex, HAL, India</i> : R K Narang, <i>Author, Drone and Aviation Policy Analyst, India.</i> : Aman Johri, <i>Jatayu Unmanned Technologies Private Ltd, India</i>
Technical Review Subcommittee	: KC Wong, <i>Sydney University, Australia</i> : Raman Singh, <i>Monash University, Australia</i> : JVR Prasad, <i>Georgia Tech, USA</i> : Farhan Gandhi, <i>Rensselaer Polytechnic Institute, USA</i> : James Wang, <i>Nanyang Tech University, Singapore</i> : Auraluck Pichitkul, <i>Suranaree University, Thailand</i> : Wan Mazlina, <i>Universiti Teknologi Mara, Malaysia</i> : Yasutada Tanabe, <i>Japan Aerospace Exploration Agency, Japan</i> : Sang Joon Shin, <i>Seoul National University, South Korea</i> : C Venkatesan, <i>Indian Institute of Technology, Jodhpur, India</i> : Abhishek, <i>Indian Institute of Technology, Kanpur, India</i> : Senthil Murugan, <i>Indian Institute of Technology, Madras, India</i> : S N Omkar, <i>Indian Institute of Science, Bengaluru, India</i> : Suresh Sundaram, <i>Indian Institute of Science, Bengaluru, India</i> : Prashant K R, <i>Rotary Wing R & D Centre, HAL, Bengaluru, India</i>
Secretariate	: Kalpana Dhar, <i>Rotary Wing Society of India, India</i> : Betty Chen, <i>Vertical Flight Society International, USA</i>

TBC: To be confirmed



ICAAMS -1 Sponsorship Opportunities



Sponsorship levels/events

	Platinum	Gold	Silver	Lunch/Dinner	Tea	Advertisement
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Or US\$	7,000 inclusive of tax	4,500 inclusive of tax	3,000 inclusive of tax	-	-	-

Sponsorships benefits

	Platinum	Gold	Silver	Lunch or Dinner	Tea
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Corporate Logo on Conference Brochure	✓	✓	✓		
Corporate Logo on Conference Hall Screen	✓	✓	✓	✓	✓
Corporate Logo on Delegate Name Badges	✓	✓			
Corporate Logo on Thank You Sponsors Panel	✓	✓	✓	✓	✓
Acknowledgment at Lunch/Dinner Venue	✓	✓		✓	
Acknowledgment at Tea Venue	✓	✓			✓
Colour Advertisement in Conference Brochure	1 Page	1 Page	½ Page	½ Page	½ Page
Signages in Reception Area	✓	✓			

Contact to process Sponsorships: Phone: 0120-4252346, 4252347, Telefax: 0120-6870876
Email: office@rws.org

Silver Jubilee Message – President Rotary Wing Society of India

Having commenced with few helicopter veterans in 1998 from a garage, 'Rotary Wing Society of India (RWSI)' has grown several folds and today represents most of the helicopter industry with over 1300 life members and 189 corporate members. It has been recognized as a major stake holder in the industry and has responsibly held the status of the nodal agency for all issues related to helicopters industry. We are also a member of IFHA, HAI and VAST and work together to implement the safety initiatives. As we have grown, we have also added the fast-emerging drone industry to our charter and have been working with several stake holders and the regulator to address the issues.

As we complete 25 years in the service of the industry, we take pride in the selfless voluntary service provided by our members to the industry in furtherance of safety and streamlining of the policies.

First International Conference on Advanced Air Mobility Systems (ICAAMS) has been planned to get the stake holders together who are at the cusp of transforming the Indian skies and change the way we think and commute. **This Conference is in Commemoration of our Silver Jubilee**, and we hope it will go a long way in giving a boost to our efforts to synergize the industry