



**2nd International Conference on
Advanced Air Mobility Systems
ICAAMS-2**



**A Joint Initiative
(VFS and RWSI)**

**VFS AUSTRALIA CHAPTER
ROTARY WING SOCIETY OF INDIA**

Presenting

ICAAMS-2

Conference & Workshop Program and Sponsorships

4-6 Dec 24

James Cook University Campus

Singapore

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 pioneers a holistic forum on
Advanced Air Mobility System (AAMS)

The **I**nternational **C**onference on **A**dvanced **A**ir **M**obility **S**ystem
ICAAMS - 2

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 ICAAMS-2 has been limited to a “Single Session and Workshop” format to enhance closer interaction during the three-day program.

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

ICAAMS -2 is an ongoing 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



Wednesday - 4 Dec 24

Time	Activity	Presenter/Authors
0745-0800	All Keynote and Paper Presenters Briefing	Ananth Srinivas, Coordinator-in-Chief
0800-0815	Briefing - ICAAMS-2	James Wang, Deputy Chair ICAAMS 2
0815-0830	Welcome Address to University	TBA
0830-0845	Introductory Address - ICAAMS Series	Arvind Sinha, Convenor-in-Chief
0845-0900	Opening Address – ICCAMS 2	Vijaya Kumar Mudubagilu, Chair ICAAMS 1
0900-0930	VFS and RWSI Address	VFS VP (Asia Aus Region) and President RWSI
0930- 1000	Keynote 1–Asia Operations and Vertical Aerospace	Derek Cheng
1000-1030	Tea/Coffee/Drinks/Networking	
Session 1 – Operations and Airspace Management <i>Chair: Auraluck Pichitkul, Thailand</i>		
1030-1100	Application of AI to UTM Problems	AK Sachdev
1100-1130	Trajectory Planning for Obstacle Avoidance in Precision Agricultural Drone Operations	Shubeeksh Kumaran, Omkar
1130-1200	Airspace Management of Autonomous UAS Operations	AK Sachdev
1200-1230	Lunch & Networking	
1230-1330	Keynote 2 – Research & Innovation Status Updates	JVR Prasad Georgia Tech
Session 2 – Airworthiness and Regulations -1 <i>Chair: SN Omkar</i>		
1330-1400	Developing Regulatory and Ecosystem for Advanced Air Mobility Systems in India	Peeush Kumar
1400-1430	Design & Development of indigenous Helicopters – Challenges & Strategies of Project Management	Kumaraswamy
1430-1500	Tea/Coffee/Drinks/Networking	
Session 3 – Aerodynamics and Design 1 <i>Chair: JVR Prasad, USA</i>		
1500-1530	Design of Performance Testing Process for Agricultural UAVs in on-Campus UAV Sandbox	Jitlada Aumpirom
1530-1600	Study on Effect of Folding of Rotor Blades on Elastomeric Bearing in an Articulated Rotor System	K. Subramanian
1600-1630	Mathematical Modelling Approach to Predict Instantaneous Health of Helicopter Engines – Phase 2	Gaurav Malik & Rabindra Patro
1630-1645	Day 1 - Vote of Thanks	BS Singh Deo, Technical Chair
1645-1700	Day 1 – Closing Remarks	James Wang, Deputy Chair ICAAMS 2
1930-2000	Keynote 3 - Advanced Air Mobility - Way Ahead	James Wang, Nanyang University, Singapore
1845-2200	Conference and RWSI & VFS Dinner & Awards – Conference Venue	

Thursday - 5 Dec 24

Time	Activity	Presenter/Authors
0815-0830	Day 2- Conference Introductory Briefing	Vijaya Kumar Mudubagilu, Chair ICAAMS-2
0830-0900	Melbourne University and IISc Joint Study Report	Jason Monty and SN Omkar
0900--0930	Keynote 4– Technology Status and Updates	James Wang
Session 4 –Systems 1 <i>Chair: Jason Monty</i>		
0930-1000	A Generalized Methodology for UAV Digital Twin Development	Himanshu Meena and SN Omkar
1000-1030	Dynamic Inversion Flight Control Laws for Autonomous Conversion of Tilt-Rotor/Wing Aircraft	Umberto Saetti
1030-1100	Tea/Coffee/Drinks/Networking	
Session 5– Aerodynamics and Design 2 <i>Chair: Gaurav Malik</i>		
1100-1130	An Efficient Inverse Aerodynamic Design Method for Rotor Sections	Lakshmi Sankar
1130-1200	Selection and optimization of Transmission System configuration of Helicopters	Bhattacharya
1200-1230	Computational Study for High- Efficiency eVTOL Proprotor Design.	Issareephat Kanishthanonda
1230-1330	Lunch and Networking	
1330-1400	Keynote 5 – Safety Regulation Status Updates	To be advised
Session 6 –Structures 1 <i>Chair: Lakshmi Sankar</i>		
1400-1430	Structural Optimization of eVTOL airframes	Dominik Schwin
1430-1500	Fatigue life of Helicopter Components A comparative study on theory and test estimates	Jayachandran Warriar
1500-1530	Tea/Coffee/Drinks/Networking	
Session 7 – Airworthiness and Regulations -2 <i>Chair: Umberto Saetti</i>		
1530-1600	Design, Testing and Certification Challenges in Development of Rotorcraft Flight Control & Utility Hydraulic Actuators	N K Agarwal
1600-1630	DC Starter Generator System Ideation and Realisation for Rotarywing Application with Novel Qualification Approach	Ashish Kumar Shrivastava
Session 8 – Structures -2 <i>Chair: Dominik Schwin</i>		
1630-1700	Advanced Drone-based Bridge Inspection: A Focus on Crack Detection	Srinivasan Siddhamoorthy
1700-1730	A Fundamental FE Modeling Approach for the Drop Test Simulation Analysis of Quadcopter (UAV) & CFD analysis of Quadcopter blades.	Amit Kumar Lodha
1730-1745	Day 2 - Vote of Thanks	BS Singh Deo, Technical Chair
1745-1800	Day 2 – Closing Address	Vijaya Kumar Mudubagilu, Chair



Friday - 6 Dec 24



Workshop

Enhancing Future VTOL (AAM) usage in the Region

The Workshop aims to provide a platform to all stakeholders from the field of research & development to manufacturers, regulators, operators, and other leaders in the industry to discuss the present status of limited use of the helicopters in the Asia Australia region and its associated issues and challenges.

As future Advanced Air Mobility (AAM) aircraft are likely to share the airspace with helicopters and are likely to be operated under similar regulations, the present problems facing the helicopter industry are likely to be carried forward to future AAM operations. The Workshop will discuss how we can ensure the smooth induction and operationalization of the new platforms while ensuring that the regulatory and operational hurdles are overcome to allow AAM to fulfill its promise as a gamechanger for society.

The Workshop will also highlight the global status of the efforts by various stakeholders in AAM. This includes the design and development, standards & certification, airspace management and operationalization of the AAM platforms. The Workshop will also discuss the challenges which the industry is likely to face as we embrace new concepts and technology.

The outcome of the Workshop will help generate ideas to develop a generic “AAM Roadmap” for the region in the immediate future by the relevant authorities to enhance the usage of not only its present helicopter fleet, but also the expected introduction of AAM platforms, by customization of the roadmap.



CONFERENCE BANQUET AND AWARDS

VFS Australia Chapter and Rotary Wing Society of India

Wednesday - 4 Dec 24: Evening

Time	Activity	Presenter/Organiser
1845-1915	Welcome Drinks	Conference Venue Organisers
1915-1930	VFS and RWSI - History and Status Video	VFS and RWSI
1930-2000	Keynote 3 - Advanced Air Mobility - Way Ahead	James Wang, <i>Nanyang University, Singapore</i>
2000-2030	VFS and RWSI Awards	VFS and RWSI
2030-2100	Dinner	Conference Venue Organisers
2100-2115	ICAAMS 2 to ICAAMS 3 - Handing Taking Over	Singapore to Thailand
2115-2200	Desert and Networking	Conference Venue Organisers



Convenor-in-Chief		: Arvind Sinha, <i>VFS, Australia Chapter</i>
Chair		: Vijaya Kumar Mudubagilu, <i>RWSI, India</i>
Deputy Chair		: James Wang, <i>VFS, Singapore Chapter</i>
Technical Chair Aerospace		: KC Wong, <i>VFS, Australia Chapter</i>
Technical Chair Aviation		: BS Singh Deo, <i>RWSI, India</i>
Executive Committee	<u>India</u>	: AS Butola, <i>RWSI, India</i> : BS Singh Deo, <i>RWSI, India</i> : Vijaya Kumar Mudubagilu, <i>RWSI, India</i>
	<u>Australia</u>	: Arvind Sinha, <i>VFS Australia Chapter</i> : Robert Hood, <i>VFS Australia Chapter</i> : KC Wong, <i>VFS, Australia Chapter</i>
	<u>Japan</u>	: Yasutada Tanabe, <i>VFS, Japan Chapter</i>
	<u>Malaysia</u>	: Wan Mazlina, <i>VFS, Malaysia Chapter</i>
	<u>Singapore</u>	: James Wang, <i>VFS Singapore Chapter</i>
	<u>S Korea</u>	: Sang Joon Shin, <i>VFS, S Korea Chapter</i>
	<u>Thailand</u>	: Auraluck Pichitkul, <i>VFS, Thailand Chapter</i>
	<u>UAE</u>	: Salim Mousallam, <i>UAE Chapter</i>
Industry Advisors	<u>India</u>	: R K Narang, <i>Author, Drone & Aviation Policy Analyst</i>
Technical Review Subcommittee	<u>Australia</u>	: Dries Verstraete, <i>Sydney University</i> : Raman Singh, <i>Monash University</i>
	<u>India</u>	: C Venkatesan, <i>IIT Jodhpur</i> : Abhishek, <i>IIT Kanpur</i> : Senthil Murugan, <i>IIT Madras</i> : S N Omkar, <i>IISc, Bengaluru</i>
	<u>Japan</u>	: Yasutada Tanabe <i>Japan Aerospace Exploration Agency</i>
	<u>Malaysia</u>	: Rizal Effendy Nasir, <i>Universiti Teknologi MARA</i> : Aman Mohd Ihsan Mamat, <i>Universiti Teknologi MARA</i> : Ahmad H Abdul Hamid, <i>Universiti Teknologi MARA</i> : Mohd Rozaiman Aziz, <i>Universiti Teknologi MARA</i> : Hamid Yusof, <i>Universiti Teknologi MARA</i>
	<u>Singapore</u>	: To be advised
	<u>S Korea</u>	: Sung N. Jung, <i>Konkuk University</i> : Kwangjung Yee, <i>Seoul National University</i> : Do-Hyung Kim, <i>Korea Electrotechnology Institute</i>
	<u>Thailand</u>	: Jiravud Klongtrujrok, <i>Royal Thai Airforce Academy</i> : Atthaphon Ariyarit, <i>Suranaree University</i>
Coordinator-in-Chiefs	<u>India</u>	: Ananth Srinivas, <i>RWSI, India</i>
	<u>Australia</u>	: Vicky Chan, <i>VFS, Australia Chapter</i>
Secretariate	<u>RWSI</u>	: Kalpana Dhar, <i>RWSI, India</i>



VFS : Betty Chen, VFS HQs, USA

ICAAMS -2 Delegates Registrations Sponsorship Opportunities



Delegates Registrations

Rates	VFS/RWSI Member	Non-Member
Regular Attendee	S\$425	S\$540
Speaker, Government, or Military	S\$400	S\$515
Fully retired or full-time student	S\$275	Must enrol in VFS/RWSI membership
<i>Registration includes coffee breaks, lunches, social & presentation materials. Non-member registration fees include a one-year VFS membership.</i>		

Sponsorship levels/events

	Platinum	Gold	Silver	Lunch/Dinner	Tea per day	Advertisement
US\$	7,000 inclusive of tax	4,500 inclusive of tax	3,000 inclusive of tax	3000 inclusive of tax	1,000 inclusive of tax	1,000 inclusive of tax

Sponsorships benefits

	Platinum	Gold	Silver	Lunch or Dinner	Tea
Free Delegates at the Event	20	15	10	10	5
Corporate Logo on Delegate Folder	✓	✓	✓	✓	✓
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:

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