



# 3<sup>rd</sup> International Conference on Advanced Air Mobility Systems

## ICAAMS-3

Jointly Organised  
VFS Australia Chapter  
VFS Thailand Chapter

Banquet and Awards and Workshop  
Sponsored by



Project Management Unit for Human Resources Development, Research & Innovation

## ICAAMS-3 Tentative Program

2-4 Dec 25  
*Kesatsart University  
Bangkok, Thailand*

**Supported by VFS Education Members**



## Tuesday - 3 Dec 25

Tentative – Based on Papers in Review (Highlighted – Papers awaited)

Time	Activity	Presenter/Authors
<b>0730-0745</b>	<b>All Keynote and Paper Presenters Briefing</b>	<b>Puwit Chaowanapreecha, Presentations Coordinator</b>
0800-0815	<b>Briefing - ICAAMS-3</b>	Auraluck Pichitkul, Deputy Chair ICAAMS 3
0815-0830	<b>Welcome Address - Organisers</b>	Pornsiri Jongkol, Acting President & Dean Suranaree University
0830-0845	<b>Welcome Address – Venue Host</b>	Navatasn Kongsamutr, Head Aerospace, Kasetsart University
0845-0900	<b>Welcome Address - Program Chair</b>	Joshua Staubs, Chair Aerospace Engineering Chulalongkorn University
0900-0915	<b>Introductory Address - ICAAMS Series</b>	Arvind Sinha, Convenor-in-Chief
0915-0930	<b>Opening Address – ICAAMS 3</b>	Vijaya Kumar Mudubagilu, Chair ICAAMS 3
<b>0930- 1000</b>	<b>Keynote 1– AAM Design and Development Updates</b> <i>Chair: Wael Bazzi, UAE</i>	<b>Industry – Thailand</b> <i>Coordinator: Aung Kyaw</i>
<b>1000-1030</b>	<b>Tea/Coffee/Drinks/Networking</b>	
<b>Session 1 – Aerodynamics 1</b> <i>Chair: Pinunta Rojratsisrikul, Thailand - Coordinator: Issareephat Kanishthanonda</i>		
1030-1100	<b>Aerodynamic Experimental-Numerical Investigation of a quadrotor eVTOL for Urban Air Mobility application</b>	Bucherelli G, Das L, Granata D, and Zanotti A
1100-1130	High Altitude UAV Rotor Blade Design Optimization	Pichitkul A, Tantrairatn S, Ariyarat A
1130-1200	Aerodynamics of Novel Tilt Wing eVTOL Design Featuring Upper and Lower Propellers	Shima E, Yonezawa, K and Sato M
<b>1200-1230</b>	<b>Lunch &amp; Networking</b>	
<b>1230-1330</b>	<b>Keynote 2 – AAM Research &amp; Innovation Updates</b> <i>Chair: Wael Bazzi, UAE</i>	<b>Academia – Thailand</b> <i>Coordinator: Chatchanun Po-oonta</i>
<b>Session 2 – Structures</b> <i>Chair: Yasutada Tanabe, Japan- Coordinator: Gorawan Sattapol</i>		
1330-1400	Integrated Structural Design and Crash Analysis of an MPDV Using the PANDORA Environment	Schwinn D, Atci K, Weiland P, Petsch M, and Kohlgrüber D
1400-1430	Aeroelastic Analysis of large aspect ratio Composite Beams	Bhanumurthy R, Shripathi V, Harish KR and Hanumanthappa H
<b>1430-1500</b>	<b>Tea/Coffee/Drinks/Networking</b>	
<b>Session 3 – Systems 1</b> <i>Chair: Lakshmi Shankar, USA - Coordinator: Manutsanan Yuenyong</i>		
1500-1530	Tau-Theory Based Guidance Algorithms for Helicopter Obstacle Field Navigation	Esmeck CC and Prasad JVR
1530-1600	Flight Test Validated for the Design of an Automatic Flight Controller for Helicopters	Anoohya BB, Seth A, Gopal H, Kavitha R, Niyas M, Vishnu HP, Shanthi A, Khare A, & George T
1600-1630	Soft Geofencing with Control Barrier Functions for Safe and Efficient Autonomous Navigation	Rahlf s FM
1630-1700	<b>Day 1 - Vote of Thanks</b>	Joshua Staubs, Program Chair
1700-1745	<b>Day 1 – Closing Remarks</b>	Auraluck Pichitkul, Deputy Chair ICAAMS 3
<b>1930-2200</b>	<b>ICAAMS 3 – Awards, Drinks &amp; Dinner</b> <i>Coordinator: Gorawan Sattapol &amp; Puwit Chaowanapreecha</i> <b>Sponsored by</b> Project Management Unit for Human Resources Development, Research & Innovation	
	<b>ICAAMS Handing Taking Over - Thailand to UAE</b> <i>Coordinator: Issareephat Kanishthanonda &amp; Kyaw Hlyan</i>	

## Wednesday – 3 Dec 25

Tentative – Based on Papers in Review (Highlighted – Papers awaited)

Time	Activity	Presenter/Authors
0815-0830	Day 2- Conference Introductory Briefing	Auraluck Pichitkul, Deputy Chair ICAAMS 3
0830-0900	<b>AAM - Study Report</b>	TBA – Thailand <i>Coordinator: Manutsanan Yuenyong</i>
0900--0930	<b>Keynote 3 – AAM Safety Regulation Updates</b> <i>Chair: Wael Bazzi, UAE</i>	Regulator – Thailand <i>Coordinator: Gorawan Sattapol</i>
<b>Session 4 –Design</b> <i>Chair: Dominik Schwinn, Germany– Coordinator: Sawarin Padtuean</i>		
0930-1000	Development and Flight Test of Tandem Rotor UAV	Sato A, Tanabe Y, Suzuki H and Ukei Y
1000-1030	Roughness Tolerant Low Reynolds Number Airfoils for Drone Rotor Applications	Ku M, Sankar L
1030-1100	Evaluating Power Optimisation in Dual-Powered Pentacopters versus Conventional Quadcopters	Rohith S, Govindarajan B and Ramakrishna P
<b>1100-1130</b>	<b>Tea/Coffee/Drinks/Networking</b>	
<b>Session 5– Operations and Management</b> <i>Chair: Auraluck Pichitkul, Thailand – Coordinator: Chatchanun Po-oonta</i>		
1130-1200	An insight into Rescue and Fire Fighting Service requirements for eVTOL operations	Barai A
1200-1230	Policies for Indian UTM Implementation and Requirements for UTM-ATM Integration in Advanced Air Mobility	Tarun S, Staines S, Advayee K, Phelixa J and Omkar N
1230-1300	STI Mechanisms Sridy to Promote the Development of UAS Ecosystem for Innovation in the Eastern Economic Corridor (EEC)	Pongkittivanit T, Pichikul A, Ariyarit A and Tantrairat S
<b>1300-1330</b>	<b>Lunch and Networking</b>	
1330-1400	<b>Keynote 4 – AAM Airspace Management Updates</b> <i>Chair: Wael Bazzi, UAE</i>	TBA - Thailand <i>Coordinator: Manutsanan Yuenyong</i>
<b>Session 6 –Systems 2</b> <i>Chair: G. Bucherelli, Italy– Coordinator: Aung Kyaw</i>		
1400-1430	Validation of Maximum Control Authority for Helicopter Autopilot - Hard-over Failure Simulation	Vagicharla D, Tomar K, Shanthi A, Khare A and Tajar AR
1430-1500	Systematic approach to Establish Control Authority of a Digital AFCS for a Helicopter through Actuator Hardover Failure Simulations and Flight Testing.	Seth A, George T and Singh GDKu
1500-1530	Quantum Secure UAV Telemetry	Tarun S, Omkar N
<b>1530-1600</b>	<b>Tea/Coffee/Drinks/Networking</b>	
<b>Session 7 – Aerodynamics 2 and Education &amp; Training</b> <i>Chair: JVR Prasad USA – Coordinator: Kyaw Hlyan</i>		
1600-1630	Finite State Wake Modeling for Dynamic Ground Effect Analysis	Metry A and Prasad JVR
1630-1700	Ahmed-Body-like eVTOL Fuselage for Aerodynamic Benchmark	Kumai H, Kitamura K, Shima E
1700-1730	Understanding the influence of leading edge tubercles on aerodynamic behaviour of delta wing for UAVs at low Reynolds number	Supreetha R, Bhanumurthy R, Mir SA, Mongia T and Bandyopadhyay R
1730-1800	Lift Rotors Interactions in Level Forward Flight	Tanabe Y, and Sugawara H
1800-1830	Education & Training Framework for AAM Aircraft	Srinivas A
1830-1845	ICAAMS-3 Closing Address	Vijaya Kumar Mudubagilu, Chair

Thursday - 4 Dec 24

## Workshop

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Project Management Unit for Human Resources Development, Research & Innovation

## Enhancing Future VTOL (AAM) usage in the Region

Chair - Pitaakphong Rattanagraikanakorn

Panel – Thailand Keynote Presenters and Study Report Team

Coordinators - Issareephat Kanishthanonda, Puwit Chaowanapreecha & Gorawan Sattapol

*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 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.*

