

AAV-2024 AUTONOMOUS AIR VEHICLES - TECHNOLOGIES & APPLICATIONS



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Jointly organised by ADE-DRDO & Design Division-AeSI

DAY-1: 29 JAN 2024 (MONDAY) SESSION SCHEDULE

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Incurrent Coories	Inaugural Session		
Inaugural Session	Chief Guest: Dr. G Satheesh Reddy		
9:30 to 11:00	President, AeSI Former Secretary, Dept. Of Defence R&D,		
	Former Chairman, DRDO Former SA to RM		
	Key note Address		
	Challenges in the making of Autonomous Flying Wing UAV		
	Shri Y Dilip, Director, ADE		
11:00 to 11:30	High Tea		
	Session -1 UAV in Ne	t-Centric warfare	
Session Chairperson	Shri SM Manjunath , Technology Director(MCS), ADE		
11:30 to 11:55	Dr Sumant Mukherjee, Sc-G, ISSA	Wargaming for Network Centric warfare	
	Shri Phani Kiran Maddukuri, Sc-E, DYSL-AT	Swarm of UAVs	
12:20 to 12:45	Shri Manickam R, Sc-E, ADE	Simulation of Manned-Unmanned Teaming: A	
		requirements overview	
12:45 to 13:10	Prof. Dr. P Rajalakshmi, IIT Hyderabad	Collaborative Navigation of Drone Swarms	
13:10 to 13:30	Session 1 Discussion		
13:30 to 14:30	Lunch		
Session-2 Stealth Technologies for UAV			
Session Chairperson	Dr S Sudharani , OS & Associate Director, ADE		
14:30 to 14:55	Dr. Vijay Kumar Sutrakar, Sc-F, ADE	Advancement in Stealth Design of UAVs	
14:55 to 15:20	Dr Nidhi Baranwal, NIT, Calicut	Aero engine IR signature suppression systems and their penalties	
15:20 to 15:45	Dr R Nagarajan, Sc-G, DLJ	Stealth: Signature and Solution	
15:45 to 16:00	Tea		
	Session-3 Advancements in UAV Design and manufacturing technologies		
Session Chairperson	Dr. Patrick J Kennedy, OS & Associate Director, ADE		
16:00 to 16:25	Shri. Veluri Sudhakar, Sc-G, ADA	Diagnostics and Prognostics of Aircraft systems	
	Dr. Samiullah T H, Chief Scientist & Dy Head ACD, NAL	Just-in-time Prepreg (JIPREG) Facility	
16:50 to 17:15	Shri. Lalan Singh, Ansys	Accelerating Design & Development of Aerospace vehicles using Advanced Technology	
17:15 to 17:45	Session 02 & 03 Discussion		



















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DAY-2: 30 JAN 2024 (TUESDAY) SESSION SCHEDULE

Session-4: Development of future UAVs			
Session Chairperson	Smt. Veena G Dikshit, Technology Director(FMCE), ADE		
9:30 to 09:55	Shri. Srikant Dudhe, HAL	Combat Air Teaming Systems (CATS)	
09:55 to 10:20	Shri. Sudhakar, Deputy Director, URSC	NGCE systems and autonomous operations design for Chandrayaan 3	
10:20 to 10:45	Dr. Suresh M, ADE	Autonomous Cooperative guidance and control strategy	
10:45 to 11:10	Shri. Jambunathan G, Head of UAV & Aeronautics Business, L&T Defence Shri. Sunil Prasad, Head of Global delivery for Aerospace, Defence, Air transport & Rail Business, LTTS	Development of High speed UAV and it's role in future warfare Future of aviation with Autonomous technologies	
11:10 to 11:30		Теа	
	Session-5 Future Technologies for UAV		
Session Chairperson	Shri Vasanth Sastry, OS & Associate Director, ADE		
11:30 to 11:55	Prof Balakrishnan, IISc	CFD Technologies for Autonomous Air Vehicles	
11:55 to 12:20	Shri LC Mangal, Director, DEAL	Software defined datalinks – enabling technology for next generation combat air platforms	
12:20 to 12:45	Shri. G Umashankar, INDIA Sales Manager, NETVIBES	Transforming Digital Thread to Virtual Twin for UAV	
12:45 to 13:15	Session 04 & 05 Discussion		
13:15 to 14:15	Lunch		
Session-6 Autonomous Technologies for UAV			
Session Chairperson	Smt. Asha Garg , OS & Associate Director, ADE		
14:15 to 14:40	Dr Vijay Patel, ADA	Automatic and autonomous functions for envelope protections in Tejas	
14:40 to 15:05	Dr Muralikrishna, CAIR	Artificial Intelligence in unmanned vehicles	
15:05 to 15:30	Prof Suresh Sundaram, IISc	Recent trends in AI for Autonomous Aerial Vehicles	
15:30 to 15:45	Tea		
15:45 – 17:15	Session 7 : Panel Discussion & Concluding Session 1. Indian eco system for Drones: Challenges and Way forward for development of drones and drone subsystems. 2. Synergy between Civil & Military drone systems & technologies.		
	Moderator	Dr. Kota Harinarayana, Chairman, DD-AeSI	
	Members	 Shri. Y Dilip, Director, ADE Dr Abhay Pashilkar, Director, CSIR-NAL Prof. Suresh Sundaram, IISc Shri. B H Laxmesh, VP, L&T Aerospace Gp Capt(Dr) RK Narang VM(Retd.), MPIDSA Prof. Abhishek, IITK 	



















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