

## Outreach Programmes

Scholarship Scheme exclusively for Girls students to pursue B.Tech (20) & M.Tech (10) Programme in discipline related to Aerospace/Aeronautical Engineering. (started in 2019)

Students benefitted since 2019:

- Post Graduate: 12
- Under Graduate: 60

### AR&DB Projects:

Sanctioned projects (1971-2022)	: 2062
Institutes Interacted	: 200+
Ongoing projects	: 127
Papers published	: 500+ (last 10 years)
Patents	: 33 (last 10 years)



### FOOTPRINTS OF AR&DB

• Andhra Pradesh	03
• Assam	02
• Bihar	01
• Chandigarh	02
• Delhi	17
• Gujarat	05
• Himanchal Pradesh	01
• Jammu & Kashmir	01
• Jharkhand	03
• Karnataka	42
• Kerala	10
• Madhya Pradesh	03
• Maharashtra	16
• Orissa	04
• Punjab	02
• Rajasthan	02
• Tamilnadu	31
• Telangana	20
• Uttar Pradesh	09
• Uttarakhand	03
• West Bengal	05

### AR&DB Sectt.:

- Dr. Narendra Kumar Arya, Secretary, AR&DB
- Dr. SK Pandey, Scientist 'F', Member Secretary ARP, M&M
- Gp Capt Anoop Bahl, Member Secretary AP, Sys/Sys Engg/ UAS
- Shri Vikas Rana, Scientist 'E', Member Secretary PP, SP
- Ms Ritu A Chopra, Tech Officer 'C'
- Shri Pranav Kumar Karna, Section Officer
- Shri Kuldeep Kumar Asiwal, Tech Officer 'A'
- Shri Ravinder Kumar, Tech Officer 'A'
- Shri Rotash, Asstt. Section Officer
- Sgt. Vivek Kapoor
- Shri Shyodas Meena, MTS
- Smt Rani Devi, MTS



### AERONAUTICS R&D BOARD (AR&DB)

DEFENCE RESEARCH & DEVELOPMENT ORGANISATION

Ministry of Defence (R&D)

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Website: www.drdo.gov.in/aeronautics-research-development/about-us



## AERONAUTICS RESEARCH & DEVELOPMENT BOARD (AR&DB)



Aeronautics R&D Board is a national body for nurturing basic, directed and futuristic research and development programmes in aeronautics through Grants-in-Aid. It provides a forum for discussions on policy issues and evolving aeronautical perspectives.

Empowering  
the Aeronautical  
Research since 1971





### Background:

Constituted by Govt. of India in 1971 to address the requirement of developing cutting edge technologies in the areas of Aeronautics and Aerospace Science.

### Vision:

To Make India self-reliant in Aerospace sector by establishing world class science and technology base for Defence, Space and Civil aviation sectors and equipping them with internationally competitive systems and solutions.

### Mission:

To establish network with research faculty in Indian academic research centres, augment research infra-structures and support advanced research in Aeronautics through well-defined projects and develop essential knowledge and capabilities for DRDO immediate and futuristic needs. The outcome will be used by DRDO labs for development of products and technology for defence services.

### Major Achievements of AR&DB

- Seed projects for fighter aircrafts, missiles, aero-engines and helicopters
- Set-up of First Hypersonic Shock Tunnel in the country at IISc, Bengaluru in 1973
- Project on LCA Studies at IISc (1981-83) - led to the conceptualization and its first design, which led to launch of LCA project
- Set-up and Upgradation of key test facilities for aerospace research across the country
- Prevention of bird concentration near airports contributing in significantly reducing bird strike incidents (acknowledged by IAF)
- Atmosphere studies and weather-forecast-modelling - (Indian Reference Atmosphere benefitted)
- National Wind tunnel Facility at IIT, Kanpur (Significantly used for Aerodynamics research of aerospace vehicles)
- Autoclave facility at NAL (Successful in promoting the local eco-system and mitigating imports)
- Composite materials for LCA and other aerospace applications

*Projects funded by the AR&DB generated a strong knowledge and R&D base in the country for its aerospace programmes: LCA, SARAS, Space Vehicles, Missiles, Helicopters (Dhruv, LUH, LCH) and many more.*

### Creation of Centre of Excellence

- Centre of Excellence for Aerospace Computational Fluid Dynamics (CFD) at IISc, Bengaluru (Year 1995-2002)
- Centre for Aerospace System Design & Engineering (CASDE) at IIT Bombay (Year 1998-2010)
- AR&DB Centre of Excellence for Composite Structures Technology (ACECOST) (Phase I-III) coordinated by CSIR-NAL (Year 1999-2018)

### Coordination of National Programmes

- National Programme for Micro Air Vehicles (NP-MICAV) (DRDO & DST) coordinated by ADE (Year 2010-2016)
- Gas Turbine Enabling Technology (GATET) programme, coordinated by GTRE (Year 2009-2017)
- A High Temperature Materials Initiative with a focus on- Gas Turbine Materials and processes (GTMAP) coordinated by DMRL (Year 2014 onwards)

### AR&DB Specialist Panels

- Aerodynamics
- Aerospace Resources
- Materials & Manufacturing
- Propulsion
- Structures
- Systems/Systems Engineering
- Unmanned Aero Systems

### Futuristic Thrust Areas

- Aircraft Health Management
- Electric Propulsion
- Advanced Stealth Technology
- Space Defence Technologies
- Advanced Materials & Manufacturing
- Alternate Propulsion Technologies
- Transport Aircraft – Military, Civil
- Manned Space Missions

### Submission of Proposals

- The proposal can be submitted by academia/ research institutes (Principal Investigators) available in the country engaged in the field of aeronautics.
- Proposals for the above specialist panels/ thrust areas and useful for DRDO immediate and futuristic needs may be submitted.
- Proposal is required to be submitted online to email id: [ardb.hqr@gov.in](mailto:ardb.hqr@gov.in)