

Aero India 2025

A Glimpse into the Future of Aerospace and Defence Innovation

Ministry of Defence

February 8, 2025

Introduction

Aero India, Asia's Largest Air Show, is a biennial air show and aviation exhibition which is held in Bengaluru, organized by the Defence Exhibition Organisation, Department of Defence Production, Ministry of Defence. Aero India is India's premier aerospace and defence exhibition where global aero vendors and the Indian Air Force (IAF) thrill the spectators with back-to-back aerobatic flying displays. It is a flagship event that brings together global industry leaders, government officials, technology experts, and defence strategists under one roof. The event not only showcases the nation's technological prowess and innovations but also provides a dynamic platform for international cooperation and strategic dialogue.





The Legacy and Importance of Aero India

Aero India has evolved into a **major international event** that not only highlights the **latest advancements** in aerospace technology but also serves as a **critical forum** for **strategic interactions** between domestic and international stakeholders. The show is a reflection of the nation's commitment to advancing its aerospace and defence capabilities. Over the years, Aero India has been **instrumental** in:

- Showcasing Cutting-Edge Technologies: The event regularly features demonstrations of state-ofthe-art aerospace systems, innovative defence solutions, and breakthrough technologies that are shaping the future of air and space travel.
- **Fostering Strategic Dialogues**: Through high-level interactions, Aero India has provided an arena for discussions on **policy**, **defence collaborations**, and the **future roadmap** of the aerospace sector.
- Enhancing International Partnerships: With participation from global aerospace giants and defence agencies, the show underscores India's growing stature as a key player in the international aerospace community.





This legacy has not only paved the way for the current editions of the event but has also set a high benchmark for the future. Aero India is more than an exhibition—it is a **convergence point of innovation, strategy, and national pride.**

Aero India 2025

Aero India 2025, the 15th edition of Aero India, is designed to be a landmark edition that leverages the successes of its predecessors while charting new territories in aerospace and defence technology. Aero India 2025 will be held from 10th to 14th February 2025 at Yelahanka Air Force Station, Bengaluru, Karnataka, India. The first three days are dedicated to business visitors, while the last two days are open to the general public.



The broad theme is 'The Runway to a Billion Opportunities'.

Events at Aero India 2025

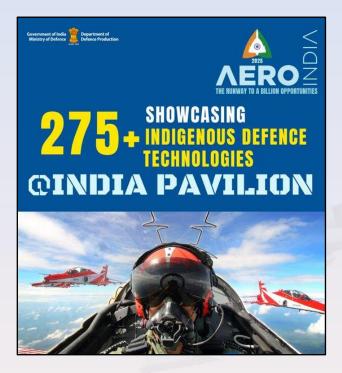
The five-day event comprises a curtain raiser event, inaugural event, Defence Ministers' Conclave, CEOs' Round-Table, iDEX start-up event, breath-taking air shows, a large exhibition area comprising India Pavilion and a trade fair of aerospace companies.

• To facilitate dialogue towards strategic partnership with friendly countries, India will host the **Defence**Ministers' Conclave on the theme 'BRIDGE -Building Resilience through International Defence

and Global Engagement'. It encapsulates the dynamic geopolitical conditions and the path to mutual prosperity, which can be BRIDGED through cooperation among nations with shared vision of security and development.



- A number of **bilateral meetings** are planned at the levels of Raksha Mantri, Raksha Rajya Mantri, Chief of Defence Staff and Secretary among others on the sidelines of the event. The focus will be on bolstering the defence and aerospace ties with friendly countries by exploring newer avenues to take the partnership to the next level.
- The CEOs' Round-Table is expected to provide a favourable platform to foreign Original Equipment
 Manufacturers (OEMs) for manufacturing in India. Global CEOs, CMDs of domestic PSUs and
 premier private defence & aerospace manufacturing companies from India will be participating in the
 event.
- The **India Pavilion** will showcase India's commitment to its Make-in-India initiative by showcasing indigenous defence manufacturing capabilities and cutting-edge technologies ready for the global stage, including the future prospects. Promotion of Indian start-ups is a focus area at Aero India 2025 and a wide spectrum of state-of-the-art technologies/products developed by them will be showcased at an exclusive **iDEX pavilion**.
- In addition, **dynamic aerobatic displays** and **live technology demonstrations** will provide an immersive experience, showcasing the potential of modern aerospace platforms and technologies. A number of seminars on various important themes are also planned as part of the event.



Aero India 2023: A Retrospective Analysis

AeroIndia 2023 Rewind					
809	53	7+ Lakh	27	250+	Rs 200
Exhibitors,	Aircraft	7+ Lakh Visitors	Countries	250+	Crore
businesses, investors, start- ups, and MSMEs	showcased India's airpower	attended	participated in the IOR+ Defence Ministers' Conclave	MoUs/partnerships finalized worth more than Rs 75.000 Crore	Rs 200 crore pledged at the maiden iDEX Investor Hub (iIH

The previous editions of Aero India played a critical role in laying the groundwork for the continued evolution of India's aerospace and defence landscape. The 14th edition of Aero India 2023 was held from 13th–17th February at Bengaluru, Karnataka and has been the largest ever edition since its inception in 1996 with more than 100 countries, 809 exhibitors, first ever Fly past with 53 aircrafts showcasing our airpower to global attendees and a total footfall of 7+ lakh visitors over five days. Aero India 2023 was characterized by a series of significant milestones and impactful demonstrations. Key aspects of the 2023 edition were:

- Showcasing Advanced Aerospace Technologies: The 2023 event provided a platform for companies to display state-of-the-art aerospace systems and defence solutions. This not only demonstrated technological innovation but also set the stage for future advancements in the field.
- Facilitating Strategic Engagements: Aero India 2023 was instrumental in bringing together a diverse group of stakeholders, including government officials, industry experts, and international delegations. The event fostered an environment of strategic dialogue that focused on collaborative ventures and technological partnerships.
- Strengthening India's Global Position: By successfully hosting a comprehensive and well-coordinated exhibition, Aero India 2023 reinforced India's commitment to advancing its aerospace capabilities. The show also underscored the country's readiness to engage with global partners in driving forward the next wave of aerospace innovation.



The successes and challenges of Aero India 2023 have provided **valuable lessons** that are being incorporated into the **planning** and **execution** of **Aero India 2025**. The focus on **operational excellence, international collaboration,** and **technological innovation**—elements that were prominently on display in 2023—serve as the cornerstone for the upcoming edition. The forward momentum generated by the previous edition is expected to translate into even greater achievements in 2025, with enhanced protocols, refined strategies, and an expanded global participation footprint.

Events at Aero India 2023

The event comprised of a **Defence Ministers' Conclave**; a **CEOs Round Table**; **Manthan** start-up event; **Bandhan** ceremony; **breath-taking air shows**; a large **exhibition**; **India Pavilion** and a **trade fair** of aerospace companies.

Major exhibitors & equipment

The **major exhibitors** included Airbus, Boeing, Dassault Aviation, Lockheed Martin, Israel Aerospace Industry, BrahMos Aerospace, Army Aviation, HC Robotics, SAAB, Safran, Rolls Royce, Larsen & Toubro, Bharat Forge Limited, Hindustan Aeronautics Limited (HAL), Bharat Electronics Limited (BEL), Bharat Dynamics Limited (BDL) and BEML Limited.



Aero India 2023 showcased design leadership and growth in **UAVs Sector, Defence Space** and futuristic technologies. The event aimed to promote **export of indigenous air platforms** like Light Combat Aircraft (LCA)-Tejas, HTT-40, Dornier Light Utility Helicopter (LUH), Light Combat Helicopter (LCH) and Advanced Light Helicopter (ALH).

Defence Ministers' Conclave

Defence Ministers' Conclave was held **on 14th February 2023**. Defence Ministers of friendly foreign countries participated in the meeting, which was organised on the theme 'Shared Prosperity through Enhanced Engagements in Defence (SPEED)'. The conclave addressed aspects related to deepen cooperation for capacity building (through investments, R&D, joint venture, co-development, co-production and provisioning of defence equipment), training, space, Artificial Intelligence (AI) and maritime security to grow together. The conclave was an opportunity for the defence ministers to engage with each other to carry forward the 'Make in India, Make for the World' vision.

Bilateral meetings

On the sidelines of Aero India 2023, a number of **bilateral meetings** were held at the levels of **Raksha Mantri, Raksha Rajya Mantri, Chief of Defence Staff** and **Defence Secretary** among others. The focus was on bolstering the defence & aerospace ties with friendly countries by exploring newer avenues to take the partnership to the next level.

CEOs Round Table

The 'CEOs Round Table', under the **chairmanship of the Raksha Mantri**, was held on 13th **February 2023**, on the theme 'Sky is not the limit: opportunities beyond boundaries.' It laid the foundation of a more robust interaction between the **Industry Partners** and **Government** with an eye on bolstering the 'Make in India' campaign.

The Round Table witnessed participation from officials, delegates and global CEOs from 26 countries including global investors such as Boeing, Lockheed, Israel Aerospace Industries, General Atomics, Liebherr Group, Raytheon Technologies, Safran, General Authority of Military Industries (GAMI) etc. Domestic PSUs like HAL, BEL, BDL, BEML Limited and Mishra Dhatu Nigam Limited also participated.

Bandhan ceremony

The Bandhan ceremony, which witnessed signing of Memoranda of Understanding (MoUs)/Agreements, Transfer of Technologies, Product Launches and other major announcements, was held on February 15th. A concerted effort was made towards forging B2B partnerships at the Bandhan ceremony and more than 250 such partnerships with a total value of more than Rs 75,000 crore have been finalized.

Manthan

The **annual defence innovation event, Manthan**, was the flagship technology showcase event held on **15**th **February**. Organised by **Innovations for Defence Excellence (iDEX)**, the Manthan platform will bring the leading innovators, start-ups, MSMEs, incubators, academia and Investors from defence & aerospace ecosystem under one roof.

Manthan had **many firsts**, including launch of challenges on Cyber Security, establishment of iDEX Investor Hub, MoUs with investors etc. Manthan 2023 provided an overview on the future vision/next initiatives of iDEX to galvanise the start-up ecosystem to foster innovation and technology development in the defence sector.

India Pavilion

The India Pavilion, based on 'Fixed Wing Platform' theme, showcased India's growth in the area, including the future prospects. There was a total of 115 companies, displaying 227 products. It further showcased the growth of India in developing an ecosystem for Fixed Wing platform which includes the demonstration of various structural modules, simulators, systems (LRUs) etc. of LCA-Tejas aircraft being produced by Private Partners. There was also be a section for Defence space, New Technologies and a UAV section which will give an insight about the growth of India in each sector.

A full scale LCA-Tejas aircraft in Full Operational Capability (FOC) configuration was at the center stage of India Pavilion. LCA Tejas is a single engine, light weight, highly agile, multi-role supersonic fighter. It has quadruplex digital fly-by-wire Flight Control System (FCS) with associated advanced flight control laws. The aircraft with delta wing is designed for 'air combat' and 'offensive air support' with 'reconnaissance' and 'anti-ship' as its secondary roles.

Seminars

A number of seminars were held during the five-day event. The **themes** included Harnessing Potential of Exservicemen for Indian Defence Industry; India's Defence Space Initiative: Opportunities for shaping Indian private space ecosystem; Indigenous development of futuristic aerospace technologies, including aero engines; Destination Karnataka: US-India defence cooperation innovation and Make in India; Advancement in maritime surveillance equipment and assets; sustenance in MRO and Obsolescence Mitigation and

achieving excellence in defence grade drones and Aatmanirbharta in Aero Armament Sustenance.

Major Agreements at Aero India 2023

- MoU between Hindustan Aeronautics Limited and Safran Helicopter Engines, France for Work Share for formation of Joint venture for Design, Development, Manufacture and life time support of **Helicopter Engines.**
- MoU between Bharat Electronics Ltd and Aeronautical Development Agency on IWBC and Other LRUs for Advanced Medium Combat Aircraft (AMCA).
- Co-operation between BSS Material Limited and Pegasus Engineering, an ADUSEA Inc. Division (USA) for **Logistic Drones for the Indian Army towards Last Mile Delivery** for forward troops deployed along the border areas with capability of operation in wind/gust condition, rain/Snow etc.
- MoU between Gopalan Aerospace India Pvt. Ltd. and Omnipol, Czech Republic for manufacturing and assembling of 1st passenger aircraft (L 410 UVP-E20 version) by a private company in India.
- MoU on collaboration of Sagar Defence Engineering Private Limited (SDEPL) & Israel Aerospace Industries (IAI) for IDEX Challenge "Autonomous Weaponized boat Swarm" for Indian Navy.
- MoU between Bharat Dynamics Limited and Bultexpro Ltd., Bulgaria for setting up the manufacturing facilities for 122mm GRAD BM ER and NONER rockets in India and fulfill the requirements (including ToT).
- MoU between GRSE and Rolls-Royce Solutions GmbH (MTU) for License production with localization of the MTU 16V4000M73L engine to support the indigenous content for the Next Generation Fast Attack Craft vessel for Indian Navy.
- BEML enters into License Agreement for Transfer of Technology (ToT) with R&DEE, DRDO for development and supply of **TRAWL Assembly for T-72/T-90 Tanks**.
- ToT of Shakti EW System from DLRL DRDO to BEL Hyderabad Unit for all system units, Bill of Material, Test procedures, integration & offering methodology.
- MoU between Hindustan Aeronautics Limited and Elta Systems Limited, Israel for cooperation on future Business in Maritime Patrol Radar (MPR) for Indian Platforms.

Products Showcased at Aero India 2023

- Vertically Launch Short Range Surface-to-Air Missile (Bharat Dynamics Limited): VLSRSAM is a next-generation, ship-based, all-weather, air defence weapon which can be used by Navy as a quick reaction point defence against supersonic sea skimming targets like aircraft and UAVs. The Missile has a smokeless propulsion system with all-weather capability. It has a highly agile configuration with state-of-the-art Electronic Counter-Counter Measures features.
- SAL Seeker ATGM for BMP II (Bharat Dynamics Limited): Semi-Active Laser Seeker based Anti-Tank Guided Missile for BMP-II is a subsonic missile with a range of 4,000 metres and flight time of 25 seconds. The missile weighs 23 kgs with the launch tube and can be used in different kinds of terrains to incapacitate the moving and stationary targets such as tanks and Infantry Combat Vehicles.
- **Jishnu** (*Bharat Dynamics Limited*): Jishnu, a Drone Delivered Missile, is light weight and miniaturised missile targeted for soft-skinned targets. It has a range of 1.5 km with a flight time of 9 seconds. The missile can be semi-automatic or completely autonomous based on the systems configurations.
- Software defined NAVIC/GPS receiver module based on indigenously-developed processors (Astra Microwave Products Limited).
- Indigenously-built 'Counter Drone Radar' based on technology from DRDO (Astra Microwave Products Limited).
- 9 mm sub-sonic ammunition (Munitions India Limited).

- **BFT on Ios** (*ideaForge Technology Limited*): BlueFire Touch BlueFire Touch, our Ground Control Station (GCS) software, is built to plan and command both mapping and surveillance missions with the ability to pre-plan missions based on operational area and target locations via waypoint-based navigation.
- **HF SDR Radio** (*Bharat Electronics Limited*): It is an advanced software defined radio. The radio is lightweight 20 W transmit capable radio. It provides a complete solution to the short-range communication requirements in the crowded HF band and long-range communications beyond line of sight.
- **Goniometer** (*Bharat Electronics Limited*): It is part of any integrated observation and fire control monitoring system for day time or night time use by the Artillery.

Looking Ahead: The Future of Aerospace and Defence in India



Aero India has always been more than just an exhibition—it is a strategic imperative that underscores India's commitment to becoming a global leader in aerospace and defence. The event plays a pivotal role in:

- **Driving Technological Advancements**: By bringing together **innovators** and **industry leaders**, Aero India acts as a catalyst for the development and deployment of next-generation aerospace systems.
- Enhancing National Security: The technologies and strategies showcased at the event contribute directly to enhancing India's defence capabilities, ensuring that the nation remains well-prepared to address contemporary and future security challenges.
- **Strengthening Economic Growth**: Beyond defence, the advancements in aerospace have far-reaching implications for economic growth, industrial development, and technological self-reliance.

Conclusion: Embracing the Future with Aero India

Aero India stands as a testament to **India's unwavering commitment to innovation**, **strategic collaboration**, and **excellence in aerospace** and **defence**. As the nation prepares to host Aero India 2025, the event promises to build on the rich legacy of previous editions—most notably, the transformative Aero India 2023. Through rigorous operational protocols, strategic partnerships, and a forward-thinking agenda, Aero India 2025 is poised to further elevate India's profile on the global aerospace stage.

Annexure

- 1. **Broad Programme of Aero India:** https://www.aeroindia.gov.in/assets/front/broad_programme.pdf
- 2. **List of Seminars:** https://www.aeroindia.gov.in/assets/front/seminar_list.pdf
- 3. List of Invited Speakers: https://www.aeroindia.gov.in/assets/front/speakers_list.pdf
- 4. Visitor Registration: https://www.aeroindia.gov.in/visitor-registration

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