

SP'S SHOWNEWS



AN SP GUIDE PUBLICATION



2025
AERO INDIA
The Runway to a Billion Opportunities

रक्षा मंत्रालय
MINISTRY OF
DEFENCE



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FEBRUARY 11, 2025

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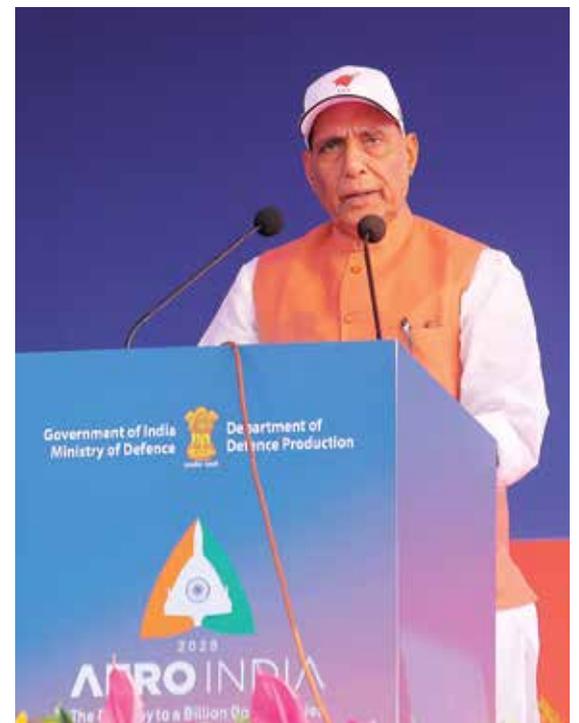
LEAD STORY

Aero India 2025 Takes Off

Spectacular Aerial Displays and Indigenous Innovations Shine on Day 1



(ABOVE) DEFENCE MINISTER RAJNATH SINGH INAUGURATED THE 15TH EDITION OF ASIA'S BIGGEST AERO SHOW - AERO INDIA 2025 AT AIR FORCE STATION, YELAHANKA IN BENGALURU
(RIGHT) DEFENCE MINISTER RAJNATH SINGH SPEAKING AT THE INAUGURATION



AYUSHEE CHAUDHARY

The 15th edition of Aero India, one of Asia's premier aerospace and defence exhibitions, commenced at the Yelahanka Air Force Station in Bengaluru, Karnataka on February 10, 2025.

The event was officially inaugurated by Defence Minister Rajnath Singh. This year's theme, "The Runway to a Billion Opportunities," underscores India's commitment to showcasing its aerial capabilities and promoting indigenous innovations in line with the 'Atmanirbhar Bharat' and 'Make in India, Make for the World' initiatives.

KEYNOTE ADDRESS BY DEFENCE MINISTER RAJNATH SINGH

In his inaugural speech, Defence Minister Rajnath Singh emphasised the significance of Aero India 2025 as a platform for international collaboration. He stated, "Aero India 2025, a confluence of critical & frontier technologies, will provide a platform to further strengthen relations among

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like-minded countries based on mutual respect, mutual interest, and mutual benefit to deal with today's uncertainties." He expressed confidence that the event would not only highlight India's industrial capabilities and technological advancements but also reinforce partnerships with friendly nations.

He further highlighted the diverse participation at the event, noting the presence of government representatives, industry leaders, air force officers, scientists, defence sector experts, startups, academia, and other stakeholders from around the globe. Singh underlined the evolution of relationships from mere buyer-seller dynamics to deeper industrial collaborations, citing successful examples of co-production and co-development with like-minded countries. He reiterated India's vision of shared security, stability, and peace, encapsulated in the philosophy of "One earth, One family, One future."

FOCUS ON DEFENCE MANUFACTURING

Rajnath Singh highlighted India's transformation into a developed nation, emphasising the creation of a vibrant defence industry ecosystem. He pointed out that the defence sector, once peripheral to the national economy, is now a driving force. Talking about the recent budget he stated that the record allocation of ₹6.81 lakh crore to the Ministry of Defence in the Union Budget 2025-26, including ₹1.80 lakh crore for capital acquisition, underscores the government's prioritisation of defence. Notably, 75 per cent of the modernisation budget is reserved for procurement through domestic sources, aiming to enhance India's Defence Industrial Complex.

The Defence Minister reiterated the government's commitment to increasing private sector participation in defence production. He cited the joint venture between Tata Advanced Systems Limited and Airbus for the production of C295 transport aircraft in Gujarat as a prime example of successful collaboration. Singh also highlighted the manufacturing of high-tech products such as the Astra Missile, New Generation Akash Missile, Autonomous Underwater Vehicle, Unmanned Surface Vessel, and Pinaka Guided Rocket within the country. He also expressed the government's resolve to surpass the ₹1.27 lakh crore defence production and ₹21,000 crore defence exports figures in the coming times.

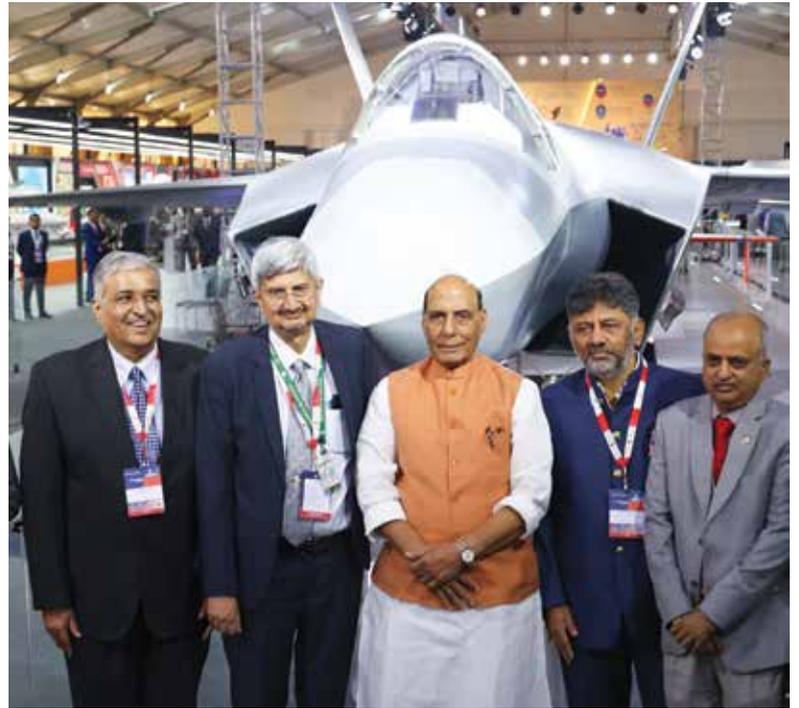
Aero India 2025 is expected to have participation from over 150 foreign companies and 900 exhibitors, showcasing advanced aerospace technologies.

INDIA PAVILION

The India Pavilion at Aero India 2025 was also inaugurated by Defence Minister Rajnath Singh. It stands as a testament to India's strides in defence innovation and self-reliance. The pavilion's entrance is graced by the Dhruv (Advanced Light Helicopter) - Next Generation, symbolising the nation's indigenous aerospace capabilities.

Inside, the pavilion is meticulously organised into five distinct zones, each highlighting India's advancements in aero, land, and naval aviation, as well as space and niche technologies. Over 275 exhibits showcase a comprehensive defence ecosystem, featuring contributions from Defence Public Sector Undertakings (DPSUs), private corporations, Micro, Small, and Medium Enterprises (MSMEs), and innovative startups.

Among the standout displays is the Combat Air Teaming System (CATS), representing the next generation of warfare technology. The Advanced Medium Combat Aircraft (AMCA) model serves as a focal point, drawing significant attention for its cutting-edge design and capabilities. Additionally, the pavilion features advanced technologies such as carrier landing assistance cameras, robotic systems, and drones. The presence of the Indian Space Research Organisation (ISRO) and emerging space startups further underscores India's growing prowess in aerospace and defence technology.



(TOP) DIGINITARIES, VIPS, OFFICIALS, DELEGATES AND VISITORS AT THE INAUGURATION; (ABOVE) DEFENCE MINISTER RAJNATH SINGH INAUGURATED THE INDIA PAVILION.

The India Pavilion not only highlights the nation's journey towards self-reliance in defence but also provides a platform for Indian industries to demonstrate their design, development, and manufacturing expertise. The central theme, 'Flight of Self-Reliance,' encapsulates India's ambition to emerge as a global aerospace and defence powerhouse.

The inaugural day of Aero India 2025 set a dynamic tone for the five-day event, emphasising India's growing capabilities in defence manufacturing, its commitment to self-reliance, and its role as a facilitator of international collaboration in the aerospace sector. ●

Defence Minister Holds Bilateral Meetings



(LEFT) DEFENCE MINISTER WELCOMED FIJIAN DEFENCE MINISTER ON HIS MAIDEN VISIT TO INDIA. BOTH SIDES EXPRESSED SATISFACTION ON THE ONGOING DEFENCE COOPERATION AND AGREED TO FURTHER DEEPEN AND DIVERSIFY THE EXISTING COLLABORATION;



(RIGHT) IN HIS MEETING WITH THE SOUTH SUDANESE DEFENCE MINISTER, DEFENCE MINISTER THANKED HIM FOR PARTICIPATING IN AERO INDIA 2025. BOTH SIDES AGREED TO INITIATE AND EXPEDITE EFFORTS TOWARDS A MEMORANDUM OF UNDERSTANDING TO EFFECTIVELY STEER THE DEFENCE COOPERATION BETWEEN BOTH COUNTRIES.



A Flying Start to Aero India 2025



IN A PRELUDE TO WHAT CAN BE EXPECTED THIS YEAR FROM AERO INDIA SHOW, IN A LANDMARK MOMENT, CAS, AIR CHIEF MARSHAL A.P. SINGH, AND COAS, GENERAL UPENDRA DWIVEDI, FLEW A SORTIE TOGETHER IN THE INDIGENOUS LCA TEJAS ON FEBRUARY 9, 2025 AT YELAHANKA, BENGALURU. THIS IS THE FIRST INSTANCE OF TWO SERVICE CHIEFS TO HAVE FLOWN TOGETHER ON AN INDIGENOUS FIGHTER AIRCRAFT. THE FLIGHT HIGHLIGHTED THE 'ATMANIRBHARTA' AND 'MAKE IN INDIA' INITIATIVES THAT WILL BE THE FOCUS AT AERO INDIA 2025, THE HANDS-ON APPROACH OF THE ARMED FORCES LEADERSHIP IN ENGAGING AND PROMOTING THESE DOMESTIC RESOURCES, INDIA'S ADVANCING INDIGENOUS DEFENCE CAPABILITIES AND THE GROWING SYNERGY & JOINTNESS AMONG THE ARMED FORCES.

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Scintillating Air Display on Day 1



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RYAN WEIR

Fostering Collaborations, Driving Innovation and Expanding Capabilities

Ryan Weir, Vice President of Commercial Sales and Marketing for India & South Asia, Boeing Commercial Airplanes talks to **SP's ShowNews**



(LEFT) BOEING 737 MAX-9; (RIGHT) BOEING 787 DREAMLINER.

SP's ShowNews (SP's): India's aviation growth trajectory suggests an unprecedented need for capacity over the next two decades. How is Boeing preparing to meet this demand, mainly through aircraft sales and localised manufacturing efforts?

Ryan Weir (Weir): Boeing is by far the largest foreign OEM in terms of sourcing from India. Boeing's sourcing from India stands over \$1.25 billion annually, 70 per cent of it from manufacturing, through its large and growing network of 300+ supplier partners that are an integral part of our global supply base. These Indian companies are manufacturing and exporting systems and components for some of Boeing's most advanced products from India to the world. Over 25 per cent of our suppliers from India are Micro, Small & Medium Enterprises (MSMEs).

We have a dedicated and fast-growing supply chain team based in India that focuses on the development of new suppliers, including MSMEs. This effort has been pivotal in the growth of our network, which is propelled by significant advancements in quality and capability along the value curve. Our suppliers are transitioning from simple assemblies to more complex ones, including advanced materials like composites and thermoplastics, and employing technologies such as full-size determinant assembly (FSDA) and robotics. To meet the needs of India's rapidly growing aviation sector, Boeing's focus is on building the necessary capabilities in design, production, certification, and MRO support. As the market evolves, we continue to assess the feasibility of co-development and co-production opportunities, ensuring we have the robust ecosystem to support them. Some of the examples below highlight the capabilities of our Indian supplier partners to deliver critical components for Boeing platforms worldwide.

- Tata Advanced Systems Limited (TASL) manufactures complex floor beams for the 787-8, 9 and 10 Dreamliners. Boeing has awarded a follow-on contract to TASL, which has already delivered more than 33,000 beams.
- Mahindra Aerostructures Pvt Ltd (MASPL) has been awarded a contract for manufacturing and supply of the Boeing 737 inlet outer barrel components and sub-assemblies, the legendary single-aisle family of airplanes, at the state-of-the-art MASPL facility in Narsapura, near Bengaluru, India.
- Wipro Infrastructure Engineering's aerospace business unit manufactured and delivered strut assemblies for 737 MAX and next-generation 737 airplane programmes.
- Bharat Forge manufactures a range of titanium-forged parts such as flap-track forgings for the next generation 737 and forgings for the 737 MAX and the 777X.
- Hyderabad-based Cyient continues to support a number of critical design-engineering projects for Boeing airplanes and currently provides design and stress support on the 747-8 Freighter and the 787.
- Boeing has awarded a contract to Motherson Sumi Systems Limited (MSSL) to manufacture and supply aftermarket molded polymer parts for commercial airplane interiors.
- Bengaluru-based SASMOS HET Technologies has signed a manufacturing contract with Boeing Commercial Airplanes (BCA) to supply Electrical panels, Shelf Assemblies and Electrical wiring systems for Boeing 767 and 767-2C aircraft.
- Tata Boeing Aerospace Limited (TBAL), our JV with Tata Advanced Systems Limited (TASL), is manufacturing complex vertical fin structures for the 737 family of airplanes – a significant milestone for the joint venture.

SP's: Workforce development remains critical for India's expanding aviation industry. What new programmes or collaborations is Boeing introducing to upskill professionals and cultivate future aviation leaders in India?

Weir: The growing demand in India's aviation sector as the third-largest aviation market globally, creates a critical need for skilled pilots, technicians, and industry leaders. With an eight-decade-long heritage, Boeing continues to invest in helping build a highly skilled and efficient workforce that contributes to both the growth of the aerospace and defence sector and the country's economic progress. We have been working with our partners on various skill development programmes that span the breadth of the aerospace industry.

Through programmes such as "Kaushal," a Boeing India supply chain initiative for skill development, Boeing partners with the industry to train people from disadvantaged backgrounds, including women and those differently abled, to become part of the mainstream aerospace manufacturing industry. Last year, Boeing announced a \$100 million investment in infrastructure and training programmes in India to meet the rising demand for pilots driven by India's growing aviation sector. The Boeing Sukanya Program will further foster women's participation in the aviation sector.

In 2022, Boeing collaborated with Indira Gandhi Rashtriya Uran Akademi (IGRUA), a premier flight training organisation under the Indian Ministry of Civil Aviation (MoCA), for opportunities to enhance safety and quality in early career flight training. It is an important step in advancing aviation training in the country through collaboration with flight training and development organisations to enhance capabilities and safety. Boeing has partnered with Air India, Tata, Micro, Small, and Medium Enterprises (MSMEs) such as Rossell Techsys, SASMOS, Jaivel, and other industrial partners like Indo MIM, Lakshmi Machine Works, Air Works, and Wipro to offer training opportunities for pilots, aircraft maintenance engineers, technicians, and frontline factory workers across India. To date, nearly 4,000 workers have benefited from these initiatives.

In addition, Boeing organises the annual Boeing-IIT National Aeromodelling Competition at engineering colleges, where participants receive training to design and build airplane models, fostering careers in aerospace. Through the Boeing University Innovation Leadership Development (BUILD) programme, Boeing collaborates with incubators, including IITs and IISc Bangalore, to mentor university graduates and early-stage startups, helping them gain visibility among investors. Boeing also partners with not-for-profits such as the Learning Links Foundation (LLF) to develop a skilled and employable workforce for the aerospace manufacturing sector.

SP's: With the rise of low-cost carriers and regional connectivity schemes in India, how does Boeing plan to cater to these airlines' unique needs?

Weir: As low-cost carriers (LCCs) and regional connectivity schemes continue to expand in India, Boeing is focused on meeting their unique needs with strategically designed solutions that prioritise operational efficiency, fuel economy, and reliability. The 737 MAX family, known for its fuel efficiency and operational versatility, is especially suited for India's price-sensitive market. The 737 MAX 8 and the higher-capacity MAX 8-200 models offer reduced operating costs per seat,

Continued on Page 7...



SURESH KUMAR K.V.

Pursuing a Diversified Growth

BEL is continuously exploring expansion and diversification into allied Defence and non-defence areas to sustain a robust growth. Suresh Kumar K.V., Director (Marketing), Bharat Electronics Ltd shares their plans for the future

SP's ShowNews (SP's): How do you look at the current international market for defence products, and what strategies is BEL employing to strengthen its global presence?

Suresh Kumar K.V. (Suresh): The Ministry of Defence has set an ambitious target of ₹50,000 crore exports by 2028-29. Bharat Electronics Ltd (BEL) is, therefore, fast expanding its global presence by making all-out efforts to tap new export markets across the globe. In the last few years, we have made substantial progress, both in terms of export orders acquisition and dispatches. We have identified multiple products and systems for targeted marketing in focussed export markets. In a bid to develop new markets in the Indian Ocean Region and friendly foreign countries (FFCs), we have also operationalised new overseas marketing offices.

All these efforts have paid rich dividends. Our Exports business saw a robust uptick in FY 2023-24 with sales growing by 92 per cent to a record \$92.98 million. BEL's products continued to find increased acceptance in countries such as France, USA, Spain, Israel, Germany, Armenia, Sri Lanka, Mauritius, UK, etc, a clear indication of the company's growing capabilities. BEL also has a healthy Export order book of \$387 million. BEL is enhancing its geostrategic reach and strategically opening overseas marketing offices in the Indian Ocean Region, South East Asia, Middle East Region and Americas.

SP's: Can you elaborate on your diversification plans?

Suresh: Defence has traditionally been contributing to around 80 per cent of the Company's annual sales revenue. BEL, however, has been continuously exploring opportunities in allied Defence and Non-Defence areas. The Company aims to increase its non-defence share in the overall business in the coming years. The total opportunity in the non-defence business segment being pursued by BEL in the next 10-15 years is more than ₹2 Lakh crores. Some of the areas BEL is focussing as part of diversification efforts include solutions for Civil Aviation,

Unmanned systems, Railway & Metro systems, Network & Cyber Security, Smart City solutions, Space Electronics, Arms & Ammunition and Seekers, Medical Electronics and Artificial Intelligence.

SP's: Tell us about your expansion plans

Suresh: From time to time, depending upon the growth needs and opportunities, BEL has been taking major initiatives to modernise and expand its infrastructure. Some of the new infrastructure initiatives taken up recently include setting up of a Defence System Integration Complex for Missiles and Weapon Systems at Palasamudram, Andhra Pradesh; state-of-the-art manufacturing facility for Electro Optics and IIR Seekers at Nimmaluru; Fuze manufacturing facility at Nagpur; manufacturing facility for Land-based EW systems at Ibrahimpatnam, Telangana; modernisation of storage magazine and hot integration facility for arms & ammunition at Vellore; and integration facility for QRSAM at Agra.

SP's: Please tell us about your company's financial performance, turnover, order book position, etc.

Suresh: BEL has always been a profit-making PSU despite various challenges including stiff competition. FY 2023-24 saw the company achieve a record turnover of ₹19,819.93 crore as against ₹17,333.37 crore in FY 2022-23, thereby registering a growth of 14.35 per cent. The growth was driven by strong performances across all segments. Defence contributed to 81 per cent of revenue in FY 2023-24 with the balance 19 per cent coming from the non-defence segment. Profit after Tax grew by 33.7 per cent to ₹4,020 crore in FY 2023-24 as against ₹3,007 crore in FY 2022-23.

BEL also continued the momentum in order acquisition by booking highest ever annual order inflow of ₹35,046 crore during FY 2023-24. The company's order book position as on January 1, 2025, stands at around ₹71,000 crore, giving it stable revenue visibility. ●

Fostering Collaborations...Continued from Page 6

aligning with the business models of LCCs aiming to maintain low fares while ensuring profitability. Additionally, the 737 MAX 10 variant, with its increased seating capacity, caters to high-density routes commonly operated by Indian LCCs. For instance, Akasa Air has placed orders for the 737 MAX 10.

India's Regional Connectivity Scheme, UDAN ("Ude Desh ka Aam Nagrik"), aims to enhance air travel accessibility by connecting underserved airports. Boeing's aircraft portfolio, including the 737 series, is well-suited for these regional operations, offering the range and performance necessary for efficient service on shorter routes. Our strong partnerships with Indian carriers, such as Akasa Air, Air India, and SpiceJet, highlight our commitment to supporting the growth of India's LCC market. Air India's historic order for up to 290 Boeing jets, including 190 737 MAXs, and Akasa Air's order of 226 737 MAX airplanes reflect our role in supporting India's growing aviation sector. Boeing also provides comprehensive lifecycle support services, including pilot and technician training and digital solutions, to optimize airline operations.

Through our tailored solutions and strategic engagements, we are well-positioned to support the evolving needs of India's low-cost carriers and regional connectivity programmes, contributing to the development of the nation's aviation infrastructure. Boeing's support extends beyond aircraft delivery, offering maintenance, training, and in-country services to ensure sustained operations and growth. This approach enables airlines to remain competitive and thrive in the dynamic Indian aviation market while maintaining operational excellence.

SP's: What can we expect from Boeing at Aero India 2025?

Weir: We are excited to be at Aero India 2025 and will continue to highlight Boeing's investments in India to build an integrated aerospace ecosystem. Our focus will be on demonstrating how Boeing is fostering collaboration across civil aviation, defence, urban air mobility, and MRO sectors to drive innovation, optimise resources, and expand manufacturing capabilities. By strengthening these connections, we aim to position India as a global aerospace hub, addressing both military and civilian aviation needs with cutting-edge technologies and solutions. Through this integrated approach, we are committed to supporting India's growth and competitiveness in the global aerospace market. ●

Span Air to Buy Bell 429

Bell Textron Inc., a Textron Inc. company, announced the signing of a purchase agreement for a Bell 429 helicopter with Span Air Private Limited.

Headquartered in New Delhi, Span Air Private Limited is a leading private and corporate air charter operator that has been at the forefront of India's aviation industry since it began operations in 1995. Upon delivery, Span Air will operate two Bell 429 helicopters, solidifying its position as the first operator to introduce the Bell 429 in India in 2010.

"Since Span Air launched the Bell 429 in India, we have seen our customers consistently select the Bell 429 for their charters because of its comfort, safety and reliability," said Captain S.K. Mallik, CEO, Span Air. "As a result, our Bell 429s are comfortably the most popular choice of aircraft among our customers and I am excited to see our new Bell 429 exceed expectations once again."

"We are honored by the trust that Span Air has placed in Bell for two decades with today's purchase of their Bell 429 helicopter," said David Sale, Managing Director, Asia Pacific, Bell.

With over 500 Bell 429s operating globally and 11 in India, the aircraft has established itself as one of the most successful light twin helicopters on the market since its certification in 2009.

The Bell 429 is renowned for its exceptional speed, performance, range, and low lifecycle cost, making it a versatile and cost-effective solution for a wide range of missions, including law enforcement, para-public operations, oil and gas exploration, and corporate transport. ●



Contributing Towards Nation's Atmanirbharta in Aerospace & Defence

VEM Technologies is one of the top renowned companies in India dealing with Defence, Aeronautics and Space programmes by design, development, manufacturing the systems

VEM Technologies was founded in the year 1988 and its mission is to consistently meet and excel customer requirements in providing superior products through pro-active interactions and timely solutions. VEM is progressively working to realise its mission.

The core strength of VEM is its highly committed work force. VEM is motivated and guided by its values, employees' health and morale, safety and integrity, trust, respect, team spirit, intuitiveness and innovation.

VEM has been into the design, develop and manufacturing the systems and sub-systems for the nose to tail of most of the Indian Missiles by working for DRDO and subsequently being one of the prominent production partners for Defence Public Sector Units.

VEM's strong Research and Development and Design and Engineering capabilities enabled VEM to come out with its own 100 per cent Indigenous Anti-Tank Guided Missile which is currently at the fag end of completion of field trails. Parallely, VEM is working on the range of tactical missile systems, Ajita, Vismai to cater to land and air version missile requirements for the armed forces. Vidhwansh is one such lethal weapon system being developed by VEM to meet the Long Range Guided Rocket requirements. Anti-Drones with soft and hard kill capable weapon system is in development and will be offered to the Indian Armed Forces soon.

As part of its capacity and capability augmentation, VEM is building the "Integrated Defence Systems Facility" near Hyderabad in a sprawling 511 acres of land. IDS is one of its kind of facility in the Private Defence Industries as it has all the state-of-



ADVANCED MEDIUM COMBAT AIRCRAFT (AMCA):
KRISHNA RAJENDRA NEELI, OFFG. PD (AMCA), ADA;
K.S. NAGESH, ASSOCIATE PD (AMCA), ADA;
V. VENKATA RAJU, CMD, VEM; H. BALAJI, SC-F, DPD, ADA.

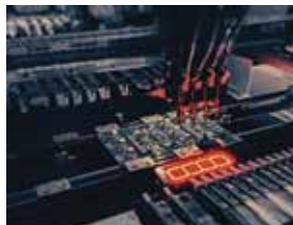
the-art facilities that would meet end to end weapon systems integrations apart from Aero structures, UAS and Anti-Drones, Radars, Sensors etc. It will cater to the requirements of NADCAP approved Electro-Plating and Heat treatment to ensure the critical processes are carried out in house to ensure the quality all through. IDS is also intended to cater to Assembly Integration and Testing of Space programmes also.

VEM is an established Aeronautics company dealing with Fighters, LCA Mk-1 where it is supplying the Centre Fuselage and beginning to supply the Generators soon. Pylon Assembly and Fuel drop tanks are in the development and will commence the supplies upon complying with the qualification parameters.

VEM is the proud partner in Advanced Fighter Aircraft programme and privileged to associate in the manufacturing all the modules based on Composite and Metallic aero structures and carried out the assembly and integration of the 1:1 AMCA Model at VEM which is in display in Aero India 2025.

Infra-Red Search and Tracker System is one such hi-tech system which is at the functional model level and will be getting through the qualification parameters. Post successful qualifications and on-board trials, VEM's IRST will be part of Indian Fighters' programmes. Similarly, VEM is actively contributing to the Indigenisation of several on-board import substitute systems, Helmet Mounting systems, IRSS, Actuation systems, EO Systems, Vibration control systems etc. Qualified to bid the end-to-end structural assemblies for the HAL Helicopter programmes and VEM is confident to raise the levels to be one of the top production partners of HAL-Helicopters division supplying the most complex and critical to technologies. ●

CONTRACT MANUFACTURING SERVICES



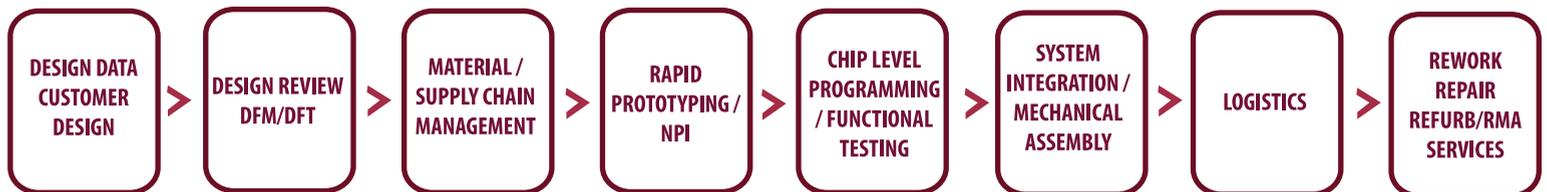
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Aero India 2025: The Defence Sector is Powering the Growth Engine of the Indian Economy, says Rajnath Singh

For the emerging Indian economy, Aero India 2025 will serve as a platform for strengthening international collaboration, showcasing India's strategic role in the global defence ecosystem

MANISH KUMAR JHA

Aero India 2025, one of the largest aerospace and defence exhibitions in Asia, promises to be a showcase of India's advancements in aviation, aerospace, and defence technologies. With a growing emphasis on self-reliance, the event is not just an exhibition, but a symbol of India's commitment to enhancing its domestic defence capabilities, both in production and innovation.

Defence Minister Rajnath Singh in his curtain-raiser address stressed that the defence industrial sector, which was earlier not viewed as a component of the national economy, has today been fully integrated with the overall economy. The sector is now a motor, powering the growth engine of the Indian economy, he said.

He also outlined the record allocation of ₹6.81 lakh crore to the Ministry of Defence in the Union Budget 2025-26, including ₹1.80 lakh crore for capital acquisition. He added that like the previous budget, 75 per cent of the modernisation budget has been reserved for procurement through domestic sources with an aim to widen and deepen the capabilities of India's Defence Industrial Complex.

RAJNATH SINGH PUTS HIS THRUST FOR SELF-RELIANCE IN DEFENCE

Defence Minister Rajnath Singh has been a vocal proponent of 'Atmanirbhar Bharat' (Self-Reliant India) in the defence sector. Under his leadership, the Indian government has made it a priority to reduce dependency on foreign imports and boost indigenous defence manufacturing. In recent years, India has made significant strides towards this vision, focusing on increasing domestic production, fostering private-sector involvement, and promoting cutting-edge technologies in defence manufacturing.

Rajnath Singh stated that the five-day event will witness the participation of Government Representatives, Industry Leaders, Air Force Officers, Scientists, Defence Sector Experts, Startups, Academia & other stakeholders from all across the globe, and this confluence would bring India's partners closer to the benefit of all.

He added that the defence manufacturers are working with a collaborative approach to strengthen the defence sector and added that today India has become a Globally Preferred Destination for Aerospace Components & Complex System Assembly and the public sector & private industries are playing an important role in this transformation.

Widening the scope of 'Make in India in Defence' He calls for strengthening the relations among like-minded countries to deal with today's uncertainties.

"We often interact as buyers and sellers, where our relations are at a transactional level. However, at another level, we forge our partnership beyond the buyer-seller relationship to the level of Industrial Collaboration. We have many successful examples of co-production and co-development with like-minded countries. For us, there is no Indian security or Indian peace in isolation. Security, stability and peace are shared constructs that transcend national borders. The presence of our foreign friends is a testimony to the fact that our partners share our vision of One earth, One family, One future," added the Defence Minister.

The Defence Ministry has been actively engaging with domestic firms to develop next-generation platforms, including fighter jets, unmanned aerial vehicles (UAVs), and advanced air defence systems. Singh's push for indigenisation is seen in the government's ongoing efforts to encourage the production of state-of-the-art weapons systems and platforms in India, rather than relying on international suppliers. The defence sector's self-reliance agenda is one of the central themes that will be showcased at Aero India 2025, where major industry players will present their contributions towards India's defence capabilities.

THE ROLE OF INDIGENOUS DEFENCE PRODUCTION

Aero India 2025 will focus on the increasing role of indigenous production, particularly in the area of fighter jets, where the spotlight will fall on India's ambitious development programs, such as the Tejas Mk2 and the Advanced Medium Combat Aircraft (AMCA). Both programs are part of India's effort to create an indigenous fighter jet that meets the needs of the Indian Air Force (IAF) and reduces the country's reliance on foreign manufacturers. Additionally, India is focusing on increasing its capacity for the production of critical components and materials used in aerospace and defence systems.

Shedding light on the accomplishments achieved from the last Aero India, Rajnath Singh stated that several high-tech products such as Astra Missile, New Generation Akash Missile, Autonomous Underwater Vehicle, Unmanned Surface Vessel, Pinaka Guided Rocket are being manufactured within the country. He voiced the Government's unwavering resolve to surpass the ₹1.27 lakh crore defence production and ₹21,000 crore defence exports figures in the coming times and ensure that the defence sector moves ahead at an unprecedented pace.

In line with indigenous production, Secretary of Defence Production Sanjeev Kumar also announced and renamed the HJT-36 trainer aircraft as Yashas at Aero India. HAL Chief D.K. Sunil said, "The aircraft can be a replacement for the Kiran Mark 2 aircraft and has good export potential also."

He also highlighted the ambitious target of defence production to exceed ₹1.60 lakh crore by the end of 2025-26 and defence exports will surpass ₹30,000 crore.

The government's recent policy decisions, such as the increase in Foreign Direct Investment (FDI) in defence manufacturing, and the creation of defence corridors in Uttar Pradesh and Tamil Nadu, aimed to attract attention from international aerospace and defence companies.

GLOBAL COMPETITION: F-35 VS. SU-57

Aero India 2025 will likely feature a high-stakes display of technological advancements in fighter aircraft, particularly the rivalry between two of the world's most advanced fighters: the F-35 Lightning II and the Su-57 Felon. The F-35, developed by Lockheed Martin, is a fifth-generation multi-role stealth fighter used by several NATO countries and is considered one of the most advanced fighter jets in the world. On the other hand, the Su-57, developed by Russia, is Russia's answer to the fifth-generation fighter and is designed to compete with the F-35 in terms of stealth, agility, and advanced avionics.

India has yet to decide whether to integrate the F-35 into its fleet or the Su-57 as the country has already an ambitious ongoing programme. India has also been enhancing its indigenous capabilities, as seen in the development of the Tejas Mk1A and the AMCA, which will feature advanced stealth and combat capabilities.

THE ROAD AHEAD: ENHANCING COLLABORATION AND INNOVATION

Aero India 2025 features some of the world's leading defence manufacturers, aerospace giants, and cutting-edge technology providers. In addition to showcasing India's indigenous defence technologies, Aero India will also allow international players to explore joint ventures and partnerships to co-develop advanced systems.

As the defence industry continues to evolve, India's focus will increasingly be on next-generation technologies, such as artificial intelligence, drones, and hypersonic weapons. Aero India 2025 will shine a light on India's potential as a hub for innovation and high-tech solutions in the defence sector. ●

Manish Kumar Jha is a Consulting & Contributing Editor for SP's Aviation, SP's Land Forces and SP's Naval Forces and a security expert. He writes on national security, military technology, strategic affairs & policies.



DEFENCE MINISTER RAJNATH SINGH ADDRESSING THE MEDIA AND THE GATHERING AT THE AERO INDIA 2025 CURTAIN RAISER AND PRESS CONFERENCE

Rafael India at Aero India 2025 – A Legacy of Partnership and Advancing Self-Reliance

At Aero India 2025, Rafael is presenting a range of advanced defence solutions designed to meet India's unique operational requirements, with a focus on cutting-edge technologies and local production capabilities.

KEY HIGHLIGHTS AT AERO INDIA 2025

Rafael's exhibit at Aero India will include the following state-of-the-art systems:

- **ICE BREAKER – Stand-Off Cruise Missile System:** A precision-guided, high-performance cruise missile, the ICE BREAKER offers long-range strike capabilities with advanced navigation and is ideal for contested environments. The system holds significant potential for local manufacturing under the 'Make in India' initiative.
- **Lite Beam – Tactical Laser Defence System:** A mobile, high-energy laser defence system designed to neutralise aerial threats such as drones, mortars, and loitering munitions. The Lite Beam offers real-time protection and is adaptable to different platforms, addressing India's growing defence needs.
- **SPIKE LR2 and SPIKE ER2 – Multi-Domain Precision Missiles:** These advanced missiles are designed for a variety of platforms, including ground-based and rotary-wing platforms. The SPIKE LR2 provides enhanced range and accuracy, while the SPIKE ER2 offers an extended reach of up to 10 km, increasing operational flexibility and effectiveness in armoured warfare.

COMMITMENT TO LOCAL MANUFACTURING AND TECHNOLOGY TRANSFER

Rafael's commitment to supporting India's defence sector is exemplified through its joint ventures:

- **Kalyani-Rafael Advanced Systems (KRAS):** This collaboration manufactures the SPIKE family of missiles, contributing to the Indian Army's anti-armour capabilities and supporting local manufacturing initiatives.
- **Astra-Rafael Comsys (ARC):** Focused on advanced communications systems, ARC enhances India's battlefield connectivity and defence communications. These partnerships reflect Rafael's ongoing efforts to foster local manufacturing, share technological know-how, and develop the Indian defence industry for both domestic and international markets.



(LEFT-RIGHT): RAFAEL ADVANCED DEFENSE SYSTEMS LTD HOSTS INDIAN DEFENCE MINISTER AT AERO INDIA 2025

Yoav Tourgeman, CEO & President of Rafael says, "India has been a key strategic partner for Rafael for nearly 30 years. We are fully committed to the continued success of the 'Make in India' initiative, strengthening local capabilities and contributing to India's defence modernisation. At Aero India 2025, we look forward to deepening our collaboration with Indian industry and announcing new developments in our partnerships, which will further enhance India's defence self-reliance and global competitiveness."

Through local collaborations and continued innovation, Rafael remains a key enabler of India's defence growth, ensuring the country's sovereignty while contributing to global security. ●

RTX and its Business Units Showcase Advanced Aerospace, Engineering, and Integrated Defence Systems

Aircraft and platforms at Aero India 2025 powered by RTX include the F-35, F-16, C-390, C295, MH-60R, and the indigenous LCA MK1

RTX's three business units – Collins Aerospace, Pratt & Whitney, and Raytheon – have partnered with India for over seven decades across commercial, defence, regional, and general aviation sectors. With nearly 7,000 employees and one of the largest sourcing of services and components from India, RTX is one of the largest multinational aerospace and defence OEMs in India.

RTX has produced a wide range of propulsion systems and products for global war fighters and aircraft programmes for decades, including systems for the latest 6th Gen aircraft in development. RTX products and solutions are found on the Indian Air Force, Indian Navy, and Indian Army's most modern platforms. Various global and India platforms showcased at Aero India 2025 – that are powered by RTX – include:

- **F-35:** Powered by Pratt & Whitney F135 engines, with products and systems from Collins Aerospace and Raytheon.
- **C-390:** RTX has significant content on most western transport aircraft in service today. Collins' high-performance solutions operational on the C-390 include aerostructures, crew seating, electric systems, avionics, oxygen systems, communication & navigation systems.
- **C-17 Globemaster:** Powered by Pratt & Whitney's dependable F117 that engines generate



RTX HAS SIGNIFICANT CONTENT ON THE MOST WESTERN TRANSPORT AIRCRAFT IN SERVICE TODAY

40,400 pounds of thrust, with products and systems from Collins Aerospace.

- **C-130J:** Products and systems from Collins Aerospace.
- **C295:** Powered by twin Pratt & Whitney's PW127G engines, and with a suite of products from Collins Aerospace.
- **F-16:** The F-16 has a suite of mission systems and defensive capabilities from Collins Aerospace and Raytheon, and Pratt & Whitney's F100 engine has powered the F-15 and F-16 since their first flights.

As India embarks on its next phase of modernization and indigenisation, RTX's advanced products and solutions will provide the technological edge and mission-readiness required for the Indian Armed Forces' various next-generation programmes, such as the Advanced Medium Combat Aircraft (AMCA), the Indian Multi Role Helicopter (IMRH) and the Medium Transport Aircraft (MTA). These include propulsion (with the F100 and V2500), power systems, avionics, aerostructures, systems, and more – across Collins Aerospace, Pratt & Whitney, and Raytheon.

At Aero India 2025, RTX showcases its advanced aviation, engineering, integrated defence systems, next-generation technology solutions, and manufacturing capabilities. ●

GE Aerospace and HAL Celebrate 40 Years of Partnership

GE Aerospace has played a significant role in building India's defence sector over the past 40 years. Since 1985, when the company first began discussing opportunities with Hindustan Aeronautics Limited (HAL), the partners have nurtured an enduring alliance that continues to grow. GE Aerospace now provides the Indian military with globally proven aircraft and marine engines, avionics, and maintenance, repair, and overhaul (MRO) services. Meanwhile, an increasing amount of engineering, manufacturing, and material sourcing for this work is taking place in India. It's a highly valued relationship that benefits both countries, economically and beyond.

A PARTNERSHIP FORGED IN COLLABORATION

"It's not just a business thing — there is a higher purpose and mission to the work we do with HAL," says Shawn Warren, Vice President and General Manager of combat and trainer engines at GE Aerospace. "India is a strategic partner to the US in the Pacific region, and our relationship with HAL supports that broader global relationship."

The American and Indian companies have worked collaboratively from the very beginning. "We've never had a customer-supplier relationship," says Rahul Gadre, the Bengaluru-based sales director for military engines and systems at GE Aerospace. "It's more of a partnership — a joining of hands." Although GE Aerospace is also working with private-sector partners in India, Gadre explains, the relationship with HAL is foundational. "HAL is the

backbone for defence in India," he says. "They have experience and expertise from the past 85 years. They literally started from scratch to develop an in-country aerospace industry."

GE Aerospace has so far delivered 65 F404 engines for the LCA Mk1 programme, and another 99 are on order for the LCA Mk1A variation. Meanwhile, the company's higher-thrust F414-GE-INS6 afterburning turbofan has been selected to power the next-gen LCA Mk2, which has increased range, and for the prototype development, testing, and certification of fifth-generation fighter jets — the most advanced class of military jets flying to date — for India's Advanced Medium Combat Aircraft (AMCA) programme. The first AMCA jets will be twin-engine aircraft, and initially each will be powered by two F414s.

STRENGTHENING BONDS FOR A NEW ERA

In a groundbreaking agreement announced during Prime Minister Narendra Modi's official state visit to the United States in June 2023, GE Aerospace and HAL are now working towards joint production of GE Aerospace's F414 engines in India.

According to Dr D.K. Sunil, Chairman and Managing Director of HAL, "Our collaboration with GE Aerospace integrates cutting-edge technologies, such as additive manufacturing, advanced materials, and digital design techniques, into India's aerospace sector. These advancements enable HAL to manufacture state-of-the-art defence products, further boosting the operational readiness of the Indian Armed Forces." ●

Tata Boeing Aerospace Delivers 300 AH-64 Apache Fuselages



Tata Boeing Aerospace Limited (TBAL) has delivered the 300th fuselage for the AH-64 Apache attack helicopter from its state-of-the-art facility in Hyderabad. These fuselages are manufactured for customers around the world, including the US Army, including the six on order with the Indian Army. The Indian Air Force operates a fleet of 22 AH-64E Apache attack helicopters. This milestone reflects TBAL's continuous dedication to bolstering India's defence capabilities and advancing the nation's indigenous manufacturing prowess.

The joint venture between Boeing and Tata Advanced Systems Limited (TASL) employs over 900 engineers and technicians, leveraging cutting-edge robotics, automation, and advanced aerospace concepts in its manufacturing processes. TBAL's 14,000 sqm facility serves as a global sole source supplier for Apache fuselages, with over 90 percent of the parts used in the Apache aerostructure assemblies manufactured in India through more than 100 Micro, Small, and Medium Enterprises (MSME) suppliers. ●

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