ISSN 2230-9225

AN SP GUIDE PUBLICATION

SP's aviation

SHARP CONTENT FOR SHARP AUDIENCE

www.sps-aviation.com

VOL 29 ISSUE 1 • 2026

EXCLUSIVE

PAUL RIGHI,
VICE PRESIDENT, SALES AND MARKETING, EURASIA, INDIA, & SOUTH ASIA, BOEING COMMERCIAL AIRPLANES

PAGE 10

Wings India 2026

SPECIAL

MEET US AT STALL NO. : 55C

BUSINESS AVIATION
INDIA'S BUSINESS AVIATION: UNREALISED POTENTIAL AND THE URGENT PATH FORWARD

CIVIL
FROM AIRCRAFT REGISTRY TO A STATE OF DESIGN AND MANUFACTURE

MRO
DEVELOPING A SUSTAINABLE DOMESTIC MRO ECOSYSTEM

+ MUCH MORE...

FALCON RESPONSE

ON DUTY, ALL SEASON

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RNI NUMBER: DELENG/2008/24199

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Subscription/Circulation
Annual Inland: ₹2,400 • Foreign: US$320

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COVER IMAGE

FalconResponse is a comprehensive 'Aircraft on Ground' support portfolio for the entire range of Falcon aircraft globally, designed to restore operations rapidly via a 24/7 Command Center, global GoTeams, and industry-first alternative lift for stranded passengers

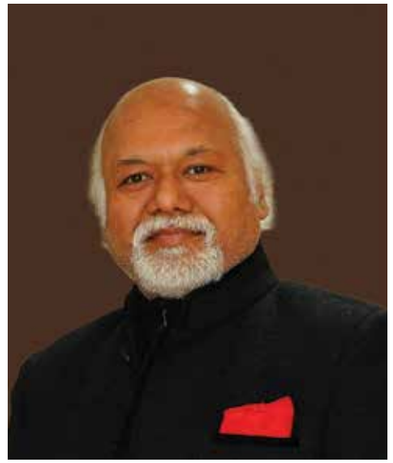
(***Cover Photo**: Dassault Aviation*)
COVER DESIGN BY: *SP's Team*

WINGS INDIA 2026 WILL BRING TOGETHER KEY STAKEHOLDERS IN THE AVIATION SECTOR FROM ACROSS THE GLOBE

BAOA Awards 2017 SPECIAL CONTRIBUTION TO BUSINESS AVIATION

Aerospace Media Awards — Asia
11th February 2020 – Singapore

> The upcoming Wings India 2026 show serves as a pivotal platform for showcasing India's commitment to the 'Atmanirbhar Bharat' vision in aviation. By bringing together global manufacturers and domestic enterprises, the event will showcase India as a burgeoning hub for aircraft design and manufacture, facilitating strategic partnerships and investments necessary to transform the nation into a global aerospace leader.



INDIA'S CIVIL AVIATION SECTOR IS AT A STRATEGIC INFLECTION point, transitioning from a 'State of Registry' to a 'State of Design and Manufacture'. In a report on building aviation in India, Manish Kumar Jha points towards this shift, anchored in the Bharatiya Vayuyan Adhiniyam, 2024, which replaces century-old laws to streamline domestic aircraft production and licensing. To achieve 'Atmanirbhar Bharat,' the government is considering granting 'infrastructure status' to aircraft manufacturing to unlock long-term financing. While challenges like high R&D costs and engine dependency remain, initiatives like the proposed Special Purpose Vehicles for regional aircraft aim to establish India as a global aerospace hub.

In an analysis of India's Business Aviation, Sanjay Julka points out that despite strong demand, India's business aviation sector faces systemic policy and regulatory hurdles that classify aircraft as luxury items rather than productivity tools. India's BA sector continues with sluggish growth, with civilian helicopter numbers far below decade-old forecasts. Critical bottlenecks include punitive taxation, lengthy FDI clearances, and a lack of dedicated infrastructure like FBOs. To unlock the sector's potential, experts advocate for "route-based" taxation, regulatory alignment with global standards, and accelerated development of GIFT City leasing frameworks. Business aviation must be recognized as a strategic resource for national productivity.

In an exclusive interview, Paul Righi, Vice President, Sales and Marketing, Boeing Commercial Planes elaborates that Boeing's long-term strategy in India centers on building a comprehensive aviation ecosystem rather than just delivering aircraft. With South Asia's commercial fleet projected to quadruple, Boeing is investing $100 million in pilot training infrastructure and advanced simulators. Beyond fleet expansion, the partnership focuses on safety, quality, and sustainability. By integrating local engineering, MRO capabilities, and skilling programmes like Boeing Kaushal, Boeing positions India as a core pillar of its global operations, ensuring growth is capability-led and enduring.

For Dassault Aviation, customer service is a philosophy that ensures Falcon jets remain mission-ready globally. At the heart of this support is FalconResponse, a 24/7 dedicated AOG (Aircraft on Ground) service that coordinates technicians and spares to minimise downtime. This is complemented by FalconBroadcast, which transmits real-time aircraft health data to allow engineers to anticipate issues before landing. Additionally, the FalconCare program provides owners with predictable maintenance costs. In a detailed report, Rohit Goel highlights that supported by an extensive MRO network and a robust spares logistics chain, Dassault ensures high dispatch reliability and complete peace of mind for operators.

The article on Developing a Sustainable Domestic MRO Ecosystem by Swaati Ketkar reviews the urgent need to build a self-reliant Maintenance, Repair, and Overhaul (MRO) ecosystem within India to support its rapidly expanding fleet. Historically dependent on foreign facilities, India is now implementing regulatory reforms and 100 per cent FDI in MRO services to reverse this trend. Success depends on creating regional MRO hubs, standardising quality systems, and addressing the shortage of trained personnel. By fostering partnerships between domestic firms and global OEMs, India aims to reduce operational costs and import dependency, ultimately transforming its aviation sector into a sustainable, high-tech service provider.

All this and more in this issue of *SP's Aviation*. Welcome aboard and we wish you safe landings!

JAYANT BARANWAL
PUBLISHER & EDITOR-IN-CHIEF

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FIRST FLIGHT OF DORNIER DO-228 FROM DIBRUGARH TO PASIGHAT, ARUNACHAL PRADESH MADE IT INDIA'S FIRST COMMERCIAL FLIGHT BY AN INDIAN-MADE AIRCRAFT FOR CIVIL AVIATION OPERATIONS. THE 17-SEATER AIRCRAFT HAS BEEN MADE BY HAL.

PHOTOGRAPH: AAI_OFFICIAL / X

BUILDING AVIATION IN INDIA: FROM AIRCRAFT REGISTRY TO A STATE OF DESIGN AND MANUFACTURE

India's civil aviation sector is at an inflexion point. Critically, the legislative overhaul signals a shift from viewing India as a "State of Registry" to a "State of Design and Manufacture," enabling both domestic enterprises and foreign partners to innovate and produce aircraft and major components locally. The idea is to address some of the challenges fast enough to seize the momentum.

By MANISH KUMAR JHA

INDIA'S AVIATION SECTOR IS CERTAINLY AT AN INFLEXION point. As one of the fastest-growing aviation markets globally, driven by rising incomes, expanding intra-national connectivity and heightened passenger mobility, the demand for aircraft—commercial, regional and cargo—is set to grow exponentially over the next decade.

In 2024, it became the world's 5th largest aviation market, handling 241 million passengers—a major post-pandemic recovery milestone, and ICRA forecasted around 7–10 per cent growth in domestic traffic in FY25. Industry reports estimate India's aviation market size to be around $14.78 billion in 2025, with a projected expansion to ~$26 billion by 2030 (CAGR ~12 per cent). Also, from 74 airports in 2014 to over 160 by late 2025, that reflects infrastructural support for traffic expansion and connectivity.

Yet paradoxically, India remains heavily dependent on imported aircraft and components, a structural vulnerability that hinders economic gains, limits technological mastery, and exposes national interests to external supply chain disruptions.

To transform this paradigm, boosting domestic aerospace manufacturing and indigenisation has become a central policy priority, anchored in "Atmanirbhar Bharat". Recent legislative and regulatory reforms signal both intent and direction, yet translating policy into production capacity and industrial competitiveness remains an immense challenge.

POLICY FOR DOMESTIC PRODUCTION: BHARATIYA VAYUYAN ADHINIYAM, 2024

The Bharatiya Vayuyan Adhiniyam, 2024, which came into effect on January 1, 2025, replaces the near-century-old Aircraft Act of 1934 and re-articulates India's aviation regulatory architecture for the 21st century. The Act expands regulatory scope to explicitly cover design, manufacture, maintenance, export and import of aircraft, thereby legally anchoring the promotion of indigenous aviation capabilities.

By realigning domestic law with international norms such as the Chicago Convention and ICAO standards, the Act not only ensures compliance with global best practice but also provides legal clarity to investors seeking regulatory certainty in manufacturing. It simplifies licensing, consolidates regulatory procedures under aviation authorities like the DGCA, and eliminates historical redundancies that previously hindered ease of doing business.

Critically, this legislative overhaul signals a shift from viewing India as a "State of Registry" to a "State of Design and Manufacture," enabling both domestic enterprises and foreign partners to innovate and produce aircraft and major components locally.

INFRASTRUCTURE STATUS: A STRATEGIC INFLEXION POINT

A high-impact proposal now being considered by the Government is granting "infrastructure status" to aircraft manufacturing under India's Harmonised Master List (HML). This designation would treat aircraft manufacturing akin to sectors like ports, highways or power, unlocking long-term financing channels, concessional credit, and pension and insurance fund investment—critical inputs for capital-intensive aerospace manufacturing.

Such a status would de-risk investment, align capital flows with long-gestation industrial projects, and create fiscal incentives that make joint ventures with global OEMs (Original Equipment Manufacturers) more attractive. In practical terms, it could catalyse partnerships, for example, between Indian firms and Airbus or other global aircraft makers for regional passenger and cargo aircraft assembly, tapping into the burgeoning domestic market for short-haul connectivity.

NATIONAL INITIATIVES & SECTORAL INCENTIVES

"The Indian government has announced plans to set up a Special Purpose Vehicle (SPV) for regional aircraft production," Minister Naidu said. He told the Rajya Sabha that India has reached a stage where it can design, manufacture and maintain aircraft, and that necessary policies are already in place to realise this vision.

KEY INCENTIVES RELEVANT TODAY

Incentive Type	Coverage	Status
PLI for aircraft/ aerospace parts	Proposed, demanded by industry	Under policy discussion for Budget 2026
State-level aerospace/industrial incentives	Land subsidies, capital/interest subsidies, skill support	Active in Andhra Pradesh and other states
FDI in MRO & aerospace services	100% automatic approval	Implemented
SEZ tax exemptions	Fiscal incentives for exporters	Available

Inter-ministerial coordination across civil aviation, defence production, MSME clusters and skill ecosystems further reflects an emergent recognition that aerospace manufacturing cannot thrive in isolation—it depends on linked supply chains, quality testing facilities, skilled talent pipelines, and global technology integration.

CHALLENGES TO SCALING DOMESTIC AIRCRAFT MANUFACTURING

While policy momentum is progressive, several entrenched challenges risk blunting India's ambitions.

- **High Entry Barriers & Capital Intensity:** High entry barrier in the aviation sector is a known factor. Aircraft and aero-component manufacturing is inherently capital-intensive, with long development cycles, high certification costs, and stringent quality standards. Domestic enterprises often lack the scale to absorb such upfront investments, making joint ventures with global OEMs and technology transfer critical—but these partnerships must also balance commercial interests with genuine skills and IP transfer.

  Leading civil aviation expert Shishir Jindal does echo that when he says; Key Challenges: High Development R&D Cost —"Developing a commercial aircraft from scratch requires several billion dollars of R&D - a major hurdle when compared with established aerospace giants."

  Then it is about the industry capacity and scale. India's aerospace industry is nascent.

  Jindal further points out: "Scaling up to mass aircraft production comparable with giants like Airbus and Boeing requires long-term capital, workforce skill building and standardised quality system."
- **Deep Import Dependency & Supply Chain Gaps:** Despite initiatives, a significant portion of aircraft components—such as engines, avionics, composites, and landing gear systems—are still imported. Building a robust domestic supply chain requires not only manufacturing facilities but also investment in precision tooling, materials science, and certification labs that comply with global standards.

  The aviation ecosystem also needs a network of tier-2 and tier-3 suppliers—often MSMEs—who can sustain component production without cost escalation or quality variance.

However, as Jindal stresses, one crucial aspect is: "In my view, the biggest challenge is development of advanced jet/turboprop engines for our domestically produced civil aircraft."

"While India excels in airframe structures, it remains dependent on foreign OEMs like GE and Rolls-Royce for engines, the most complex and expensive part of an aircraft," he rues on the critical tech that India must address now.

- **Regulatory & Certification Hurdles:** Certification by aviation authorities, both domestic and international, remains a complex and time-consuming process. While the Bharatiya Vayuyan Adhiniyam aims to streamline these processes, robust regulatory mechanisms must be matched with capacity expansion within the DGCA and allied bodies to avoid bottlenecks that deter investors.

Alongside, it is equally important to outline the certification standards as Jindal further emphasises the need to strengthen

HAL'S ADVANCED LIGHT CIVIL HELICOPTER 'DHRUV NG' POWERED BY THE INDIGENOUS SHAKTI ENGINE SHOWCASES INDIA'S STRENGTH TO DESIGN, DEVELOP AND MANUFACTURE WORLD-CLASS ROTARY-WING PLATFORMS FOR CIVIL AND COMMERCIAL OPERATIONS

PHOTOGRAPH: HAL

DGCA/EASA/FAA and advanced manufacturing technologies (like composite material and avionics), which demand high technical competencies that are still evolving locally.

Importantly, Aircraft manufacturing demands a highly skilled workforce across aeronautical engineering, systems integration, quality assurance, and advanced manufacturing technologies like additive manufacturing and composite fabrication. India must expand specialised training, R&D collaboration with universities, and upskilling initiatives to match the technical demands of aerospace production.

CATALYSING PRIVATE SECTOR PARTICIPATION

Encouraging domestic players (beyond public sector stalwarts like HAL) to enter civil aerospace will diversify innovation and reduce the cycle. Incentives for startups in aerospace tech, seed funding linked to R&D milestones, and risk-sharing through government co-investment can accelerate industrial capacity.

Joint ventures with global aerospace manufacturers should be structured with clear technology transfer commitments, co-development roadmaps, and export-oriented production goals to ensure domestic firms acquire competencies rather than becoming mere assembly lines.

National Civil Aviation Policy (NACP) 2016 focuses on regional connectivity (UDAN) to create a steady demand for 19–70-seater aircraft, making small-scale indigenous production commercially viable. That build-up opportunity and scale advantage that India has even now.

Jindal points to the recent co-development model with airbus albeit in defence, but it clearly shows the way forward. "Atmanirbhar Bharat' and 'Make in India' missions mandate local sourcing and offer incentives for domestic assembly. A landmark success is the C295 Project in Vadodara, a partnership between Tata Advanced Systems and Airbus, he elaborates.

Within India, "many other private players like Adani, Ambani and Mahindra are also coming up under the PPP Model and Joint Venture with foreign companies, and India will see huge investment in this sector, creating a lot of jobs and opportunities for local high-tech vendors for aircraft components, he further explains.

Synergies between civil and defence aerospace production—especially under Atmanirbhar Bharat—can provide spillover technology and scale. India's defence aviation manufacturing, led by HAL and its network, offers valuable lessons in indigenisation and supplier ecosystem development that could inform civil aviation strategies.

India's strategy to produce indigenous civil aircraft is rooted in ambitious policy frameworks, while significant challenges remain.

CAPITAL MARKET & INSTITUTIONAL FINANCE ALIGNMENT

Granting infrastructure status would allow long-term financing from institutional investors and pension funds—vital for projects with extended ROI horizons. Coupled with export credit agencies and sovereign incentives, this could effectively tip the scales in favour of domestic manufacturing projects.

POLICY TO PRODUCTION

India's thrust toward indigenisation and domestic aircraft manufacturing marks a strategic pivot—from importer to potential global producer. Legislative reforms like the Bharatiya Vayuyan Adhiniyam, 2024, provide the legal foundation; infrastructure status proposals promise financial leverage; and Make in India's ideological impetus underscores a broader economic ambition.

But the real test lies in execution, in building an ecosystem where policy certainty intersects with industrial capability, where capital meets innovation, and where regulatory frameworks support—not stifle—enterprise.

India's strategy to produce indigenous civil aircraft is rooted in ambitious policy frameworks, while significant challenges remain.

If successfully realised, India could not only reduce import dependency and strengthen sovereign capacity but also emerge as a regional aviation manufacturing hub, creating skilled jobs, expanding exports, and bolstering technological leadership in an industry that literally keeps nations aloft. SP

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.

INDIA HAS SUPERIOR DEMAND AND CAPABILITY BUT NEEDS URGENCY, COORDINATION, AND AMBITION TO BUILD BUSINESS AVIATION AS A STRATEGIC RESOURCE

INDIA'S BUSINESS AVIATION: UNREALISED POTENTIAL AND THE URGENT PATH FORWARD

India's business aviation sector faces systemic policy, taxation, and regulatory constraints, despite strong demand. Treating aircraft as productivity assets, reforming taxes, liberalising FDI, and building infrastructure are essential to unlock growth in this sector.

By **SANJAY JULKA,**
CEO TECHNICAL, CLUB ONE AIR

GEN Z MULTI-MILLIONAIRES AND BILLIONAIRES VIEW BUSINESS jets not as luxury symbols, but as essential productivity tools. A single aircraft enables a founder to seal deals in Mumbai, Pune, and Bengaluru in a single day—tripling meetings, market reach, and revenue potential. This is efficient time management, not extravagance. Yet, despite surging demand, India's business aviation sector lags far behind its potential.

PROMISE VS. STARK REALITY
A decade ago, forecasts predicted 2,000 helicopters and strong business jet growth by 2025, establishing the sector as vital infrastructure for tier-2 and tier-3 connectivity. Reality today stands at around 300–400 civilian helicopters and gradual business jet expansion. Growth persists, but painfully slow.

PHOTOGRAPH: EMIRATES EXECUTIVE

THERE IS INCREASING RECOGNITION OF THE VALUE OF BUSINESS AVIATION IN INDIA BUT THE BOTTLENECKS OF GENERALIST POLICIES CONTINUE TO BE APPLIED

PHOTOGRAPH: DASSAULT AVIATION

Demand is undeniable. Industrialists, multi-city enterprises, and entrepreneurs increasingly recognise the value of business aviation. The bottleneck lies elsewhere. Generalist policies continue to be applied to a highly specialised sector that requires bespoke expertise, incentives, and infrastructure.

CRITICAL CONTRADICTIONS STALLING PROGRESS

FDI Barriers: While 100 per cent FDI is permitted for non-scheduled operators, lengthy clearances—often extending to nine months—and substantial control restrictions repel investors. This contrasts sharply with swift approvals in markets like the UAE and Saudi Arabia where there is nil restriction on local participation.

Punitive Taxation: High import duties on aircraft acquisition costs and incorrectly categorising productive capital assets as luxury goods are suppressing fleet growth and job creation.

Over-Regulation: Duplicative certifications and pilot requirements beyond global norms drain talent and push operational costs.

Manpower Mismanagement: Trained pilots and engineers migrate abroad, while experienced retirees are not leveraged for regulatory, advisory, or training roles.

Incomplete Infrastructure: India has approximately 160 operational airports, up from 74 in 2014, yet few offer dedicated FBOs, round-the-clock operations, hangars, or efficient customs processing.

> High import duties on aircraft acquisition costs and incorrectly categorising productive capital assets as luxury goods are suppressing fleet growth and job creation

GIFT City Leasing Undermined: Despite a promising framework and a growing aviation asset base, delays and repossession uncertainties discourage global lessors even under Cape Town Convention protections.

THE ESSENTIAL MINDSET SHIFT

Each type of operation—scheduled or non-scheduled—has a role to play in nation-building. This is not luxury. Luxury is flying from Delhi to Mumbai or Kolkata or to another well-served airport in a private jet when scheduled services are available every 30 minutes. Such operations can and should attract steep taxation. That is where the government's focus should be.

However, when taxes are levied uniformly at the point of import for all non-scheduled aircraft, the burden unfairly falls on underserved and unserved routes, air ambulances, religious tourism flights, survey missions, and special-purpose operations—activities that by no stretch of imagination can be classified as luxury.

The solution lies in shifting the tax burden away from imports and toward routes. By levying heavy GST on genuinely luxury, well-served city-pair operations, the government can collect the same or even higher revenue, especially as import volumes increase. This approach corrects the perception of luxury, protects essential aviation services, and aligns taxation with actual usage.

EXCLUSIVE GENERAL AVIATION TERMINAL FOR PRIVATE AIRCRAFT USERS AT RAJIV GANDHI INTERNATIONAL AIRPORT, HYDERABAD

PHOTOGRAPH: GMR

Once the burden of taxation shifts from import to usage, perception changes, a natural fallout should be paving the way for fractional ownership and aircraft management models—frameworks that have been the bedrock of business aviation growth in the United States, Europe, the Middle East, and other fast-growing aviation economies.

The natural progression of aviation in a town is airstrip ⟶ small aircraft ⟶ industrialisation and town development ⟶ regional and charter aircraft ⟶ city growth ⟶ regular aircraft like A320 and Boeing 737 ⟶ metros ⟶ wide-body aircraft and international traffic. Hence role of small aircraft or non-scheduled aircraft, in nation building, needs to be well understood. Transformation story of Raigarh as a direct result of construction of an airport, is a testament to the same.

ACTIONABLE REFORMS NEEDED NOW

Tax Rationalisation: Implement route-based taxation; paving the way for aircraft management concept and fractional ownership.

FDI Liberalisation: True 100 per cent FDI with time bound four week, fully digitised clearances and proportional ownership rights.

Regulatory Streamlining: Align with FAA and EASA norms; eliminate duplication; redeploy experienced retirees as sector experts.

GIFT City Acceleration: Automate approvals, ensure repossession within 5–10 days, extend fiscal benefits, and undertake global outreach.

Ecosystem Development: Mandate FBOs and 24/7 operations at key airports; create regional MRO hubs; construct night landing and hangarage facilities on all airports.

Global Positioning: Showcase India as a repository of intelligent english speaking manpower and regulations with no red tapism, so as to attract OEMs to open component manufacturing, engine workshops and assembly lines.

Incentivise Private Participation in Aviation Infrastructure Development: To give fillip to aviation infrastructure, training centers, MROs and aircraft manufacturing.

Coordination Key: Establish a central aviation think tank to harmonise standards, eliminate duplication, and unify stakeholder efforts.

> China, UAE and Brazil built a thriving business aviation sector in just a few years. India has superior demand and, talent, but needs momentum

China, UAE and Brazil built a thriving business aviation sector in just a few years. India has superior demand and, talent, but needs momentum. What we lack is not capability, but urgency, coordination, and ambition.

Business aviation seeks no special privilege, only fair recognition as strategic resource critical to regional development and national productivity. The window is open, but competitors such as Singapore, Dubai, and Kuala Lumpur are pulling ahead. The choice before us is clear: excellence or mediocrity before the opportunity closes. SP

PHOTOGRAPH: BOEING

A PARTNERSHIP FOR THE SKIES

From Fleet expansion to System Building, **Paul Righi, Vice President, Sales and Marketing,** Eurasia, India, & South Asia, Boeing Commercial Airplanes talks to ***SP's Aviation*** on Boeing's long-term India play

***SP's Aviation* (SP's): With India's aviation market reaching new heights, how is Boeing strengthening its presence and addressing the unprecedented demand for commercial aircraft?**

Paul Righi (Paul): India's aviation growth has entered a phase defined not only by scale but by structural transformation. Boeing's recent Commercial Market Outlook projects that South Asia's commercial fleet will nearly quadruple by 2043, with Indian carriers accounting for the majority of the region's 2,800 plus new airplane deliveries. This growth is reshaping travel patterns enabling greater point-to-point connectivity across India and into international markets.

Boeing's response to this demand is deliberately two-pronged. On the supply side, we are progressively increasing production rates across key programmes as supply-chain stability improves. Equally important, we are investing in the ecosystem that surrounds the aircraft–engineering capability, maintenance readiness, logistics infrastructure, and workforce development, to ensure growth is sustainable and predictable.

Investments across co-production and co-development, MRO capability, spares availability, digital solutions for predictive maintenance, and workforce skilling, including programmes such as the Boeing Kaushal skilling programme, and STEM initiatives like the Boeing Sukanya Program, reflect this long-term approach. By combining advanced aircraft deliveries with deeper local capability, we are positioning India as a core pillar of Boeing's global aviation ecosystem, not just a destination market.

> "By combining advanced aircraft deliveries with deeper local capability, we are positioning India as a core pillar of Boeing's global aviation ecosystem, not just a destination market"

SP's: As India's aviation sector scales rapidly, how is Boeing reinforcing its focus on safety and quality?

Paul: Safety and quality are foundational to how Boeing designs and builds airplanes, and that focus does not change with scale. As production rates increase, our priority has been to strengthen the discipline of our manufacturing system– to manufacture with greater consistency and conformance.

Over the past few years, Boeing has reinforced safety and quality through tighter process controls, enhanced training, and deeper, data-led engagement across our supplier base. This includes earlier identification of quality issues in the build process, clearer work instructions, and stronger accountability at each stage of production. These actions are delivering measurable results. We have reduced manufacturing defects by up to 40 per cent and cut the number of unfinished or pending jobs by approximately 60 per cent as aircraft move through final assembly. Addressing issues earlier improves production flow, stability, and confidence in the airplanes we deliver.

Scaling safely is not about speed; it is about discipline. By embedding quality into everyday operations, across engineering, manufacturing, and the supply chain, we are strengthening the systems that allow production to scale while maintaining the highest safety standards.

SP's: How is Boeing helping India integrate sustainability into the next phase of its aviation growth?

Paul: Sustainability in aviation will be driven by practical solutions and Sustainable Aviation Fuel (SAF) is the most immediate lever available to reduce lifecycle emissions. Boeing's focus in India is therefore on enabling SAF adoption through partnerships that address the entire ecosystem–from feedstock to certification and policy readiness. In this context, Boeing has partnered with Hindustan Petroleum Corporation Limited (HPCL) to advance sustainable aviation fuel pathways in India. The collaboration is focused on evaluating feedstock options, supporting fuel qualification and certification processes, and helping build the technical and regulatory foundations required for SAF production and use at scale.

India has strong underlying advantages including feedstock potential, refining expertise, and a rapidly growing aviation market, but SAF adoption will require alignment across industry, energy providers, and policymakers. Our work with HPCL is aimed at accelerating that alignment, moving beyond pilots and studies toward implementation-ready pathways.

Over time, this approach can help India integrate sustainability into aviation growth in a way that is both economically viable and operationally credible. The objective is not incremental progress, but to enable SAF to become a practical component of India's long-term aviation system.

AIR INDIA'S FIRST NEW BOEING 787-9 LANDS AT DELHI'S INDIRA GANDHI INTERNATIONAL AIRPORT ON JANUARY 12, 2026

PHOTOGRAPH: AIR INDIA

SP's: Workforce readiness is often cited as a constraint to aviation growth. How is Boeing supporting India's talent needs?
Paul: India's advantage lies in talent at scale. The challenge is ensuring skills are built fast enough, and to global standards, to keep pace with aviation growth. Boeing's approach focuses on readiness, not just numbers. We are investing $100 million toward pilot training infrastructure and advanced training systems, recognising that fleet expansion must be matched by the availability of well-trained pilots and instructors. This investment supports modern simulators, training facilities, and programmes designed to maintain the highest safety and operational standards as pilot demand accelerates. Beyond flight decks, our focus extends across the broader skilling ecosystem. Through structured skilling initiatives such as the Boeing Kaushal skilling programme, we are helping build industry-ready capabilities across the aerospace supply chain, from technicians to supplier workforces. At the academic level, programmes including the National Aeromodelling Competition and the Boeing University Innovation Leadership Development (BUILD) initiative are engaging students and early-stage startups, encouraging innovation and practical problem-solving aligned with real-world aerospace challenges. Initiatives such as the Boeing Sukanya Program further strengthen this approach by expanding pathways for women in aviation and aerospace roles. Together, these efforts are aimed at creating a deep, diverse, and globally competitive talent base–one that can consistently support safety, quality, and reliability as India's aviation sector scales.

> "We are investing $100 million toward pilot training infrastructure and advanced training systems, recognising that fleet expansion must be matched by the availability of well-trained pilots and instructors."

SP's: Looking ahead, what will distinguish India's aviation growth from other markets?
Paul: What will distinguish India is not the pace of its aviation growth, but the way that growth is being structured. Many markets expand demand first and build capability later, often reacting to constraints after they appear. India has the opportunity to do the opposite–to build systems, skills, and institutions in parallel with scale.

Three factors make this possible. First, India is investing across the full aviation value chain simultaneously –infrastructure, manufacturing, maintenance capability, engineering, and talent, rather than treating them as sequential steps. Second, the depth and diversity of India's talent pool allow capability to scale faster than in most markets, provided skilling and certification keep pace. Third, there is increasing alignment between policy intent and industry execution, which is essential for long-term predictability.

If this alignment holds, India's aviation sector will be defined less by volume metrics and more by capability outcomes–how efficiently fleets are supported, how safely operations scale, and how consistently global standards are met. That shift from growth-led expansion to capability-led maturity is what will determine whether India's aviation success is cyclical or enduring. SP

AT THE HEART OF DASSAULT'S SERVICE NETWORK LIES FALCONRESPONSE—THE COMPANY'S DEDICATED AIRCRAFT-ON-GROUND AND DISPATCH SERVICE THAT ENSURES GROUNDED AIRCRAFT RETURN TO SERVICE IN THE SHORTEST POSSIBLE TIME

PHOTOGRAPH: DASSAULT AVIATION / K. TOKUNAGA

THE ART OF SEAMLESS SUPPORT

In an industry where every minute counts, Dassault's commitment to Falcon fleet support and customer care turns aircraft ownership into an experience defined by confidence and complete peace of mind

By ROHIT GOEL

FOR DASSAULT AVIATION, CUSTOMER SERVICE IS NOT A POST-sale obligation—it is a philosophy that defines the Falcon ownership experience. From the moment an aircraft leaves the assembly line, it enters a global ecosystem of care, one that combines human expertise, advanced digital monitoring, and round-the-clock support. Dassault's official communications consistently underline one mission, to deliver the most comprehensive support network in business aviation, ensuring every Falcon jet remains mission-ready, wherever it flies.

A NETWORK BUILT ON TRUST AND TECHNOLOGY

Dassault's 24/7 operational support structure is designed to minimise downtime and guarantee swift response, regardless of geography. At the heart of this system lies FalconResponse—the company's dedicated aircraft-on-ground (AOG) and dispatch service. FalconResponse operates through command centres that work continuously, coordinating technicians, spares, and logistics to bring grounded aircraft back into service in the shortest possible time.

(ABOVE AND RIGHT) FROM THE MOMENT AN AIRCRAFT LEAVES THE ASSEMBLY LINE, IT ENTERS A GLOBAL ECOSYSTEM OF CARE, ONE THAT COMBINES HUMAN EXPERTISE, ADVANCED DIGITAL MONITORING, AND ROUND-THE-CLOCK SUPPORT

Dassault describes FalconResponse as a "global lifeline" for Falcon operators. The service is more than just a hotline—it's a dynamic coordination platform linking regional maintenance centres, parts depots, and field teams. When an AOG occurs, a dedicated operations manager mobilises the nearest resources—whether that means dispatching a replacement part, flying in technicians, or even arranging a support aircraft to transport critical personnel or components.

Complementing this is FalconBroadcast, a digital tool that brings aircraft health data to ground teams in real time. It transmits maintenance alerts and performance parameters from the aircraft's EASy flight deck while in flight, allowing engineers to diagnose issues and prepare corrective measures before the jet even lands. FalconBroadcast exemplifies how Dassault uses data and connectivity to anticipate problems rather than merely react to them—an evolution from reactive service to predictive maintenance.

By linking FalconBroadcast's proactive monitoring with FalconResponse's immediate action capability, Dassault has effectively created a closed-loop support system. The result is faster fault isolation, reduced unscheduled downtime, and an enhanced sense of confidence among operators who know that the OEM is watching over their fleet 24 hours a day.

PREDICTABLE MAINTENANCE THROUGH FALCONCARE

At the core of Dassault's aftersales strategy lies FalconCare, a comprehensive maintenance-cost management programme designed to offer predictability and peace of mind to owners. Through FalconCare, operators can opt for fixed-cost packages covering parts, labour, and major inspections—including C-checks—thus shielding them from unexpected financial fluctuations.

The programme's value extends beyond cost control. Every aircraft enrolled in FalconCare benefits from continuous OEM oversight, ensuring that maintenance is performed to factory specifications. This in turn protects residual values and assures prospective buyers that the aircraft has been serviced under Dassault's supervision.

Dassault positions FalconCare as a hallmark of its "total lifecycle support" philosophy. For smaller flight departments, the appeal lies in budget stability; for larger fleet operators, it's the ability to standardise maintenance planning across multiple aircraft. The programme also covers AOG support, meaning that unexpected issues encountered during missions are resolved within the framework of the customer's predictable maintenance plan.

PHOTOGRAPHS: DASSAULT FALCON

(ABOVE AND LEFT) FALCONBROADCAST TRANSMITS LIVE AIRCRAFT HEALTH DATA TO GROUND TEAMS, ALLOWING ENGINEERS TO ANTICIPATE AND ADDRESS POTENTIAL ISSUES BEFORE LANDING—TURNING REACTIVE MAINTENANCE INTO PROACTIVE RELIABILITY

Supporting FalconCare's global reach is Dassault's extensive MRO network, now comprising more than 60 facilities worldwide. The network blends company-owned maintenance centres with authorised service partners strategically located to offer seamless geographic coverage. Dassault's own MRO hubs handle heavy inspections, structural work, and modifications, while regional partners provide line maintenance and shorter turnaround services.

This model offers operators flexibility without compromising standards. As Dassault states, "every service centre bearing the Falcon name meets the same requirements for tooling, training and quality." The company's decision to maintain a large portion of its network under direct ownership ensures that technical standards and customer experience remain consistent worldwide.

THE BACKBONE: SPARES AND LOGISTICS

Availability of spare parts is often the true measure of an OEM's support capability, and Dassault has invested heavily in this area. Through its Falcon Spares division, the company has built one of the most geographically distributed logistics networks in business aviation.

Dassault operates more than a dozen major parts distribution centres and logistics hubs across every key region as well as regional hubs. This network is designed around a simple but ambitious goal—making parts available "anytime, anywhere." Dassault's logistics teams work in close coordination with the FalconResponse command centres, ensuring that parts can be shipped in a matter of hours rather than days. The company emphasises that its spares pricing remains competitive while maintaining the reliability standards expected from an OEM.

The FalconBroadcast system again plays a vital supporting role here. When the aircraft transmits a fault message during flight, Dassault's command centre can pre-position the required part and technician at the arrival airport, transforming what might have been a lengthy delay into a routine service stop.

This tightly integrated spares ecosystem—backed by digital monitoring and proactive logistics—translates to one of the highest dispatch reliability rates in the business aviation sector.

FLEET SUPPORT AND OPERATIONAL EXPERTISE

While technical response and logistics are critical, Dassault's fleet support model extends into the daily operational realities of its customers. Dedicated operational support teams, compris-

PHOTOGRAPHS: DASSAULT AVIATION / PAPER&PLANE, DASSAULT FALCON

FROM FALCONCARE'S PREDICTABLE MAINTENANCE TO FALCONRESPONSE'S GLOBAL REACH AND A 24/7 LOGISTICS NETWORK, DASSAULT'S CUSTOMER SERVICE PHILOSOPHY ENSURES EVERY FALCON REMAINS MISSION-READY, WHEREVER IT FLIES

PHOTOGRAPH: DASSAULT AVIATION / A. DASTE

ing OEM engineers and technical representatives, work directly with operators and flight departments. Their remit covers line maintenance troubleshooting, interpretation of service bulletins, assistance with modifications, and operational advice.

This close relationship between operator and OEM fosters a deeper understanding of aircraft behaviour in diverse environments, feeding valuable feedback into Dassault's design and product improvement loops. It also helps operators stay compliant with the latest updates, ensuring that every Falcon in the fleet benefits from the most current technical standards.

Dassault's operational support infrastructure is also reinforced by its own training and documentation ecosystem. Pilot and maintenance training programmes are developed and continuously updated in coordination with Dassault's engineering teams, ensuring that crews and technicians remain current on aircraft systems and procedures.

In practice, this means that support is not confined to maintenance events—it extends to every phase of operation. Whether it's route planning advice, software updates, or performance optimisation, the Falcon support network functions as a living, adaptive partnership between the manufacturer and the operator.

> Through FalconCare, operators gain predictable, fixed-cost maintenance coverage backed by OEM oversight, ensuring factory-standard servicing and sustained aircraft value

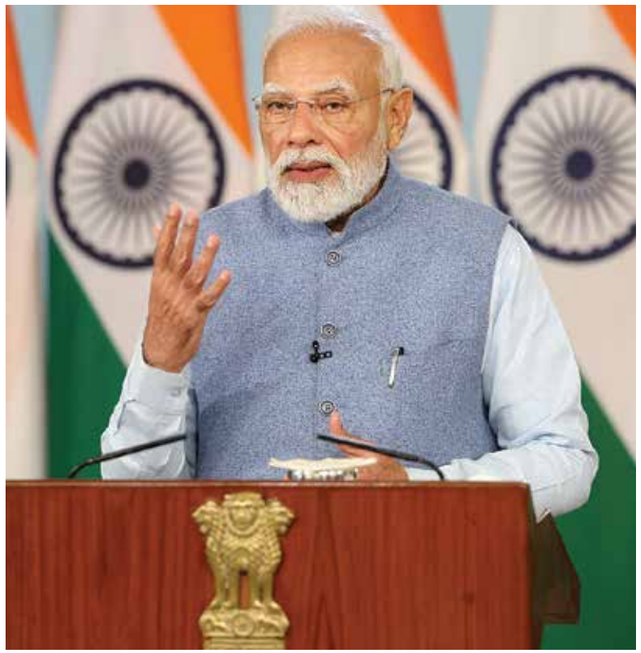
A CONTINUOUS COMMITMENT

Dassault Aviation's approach to customer service is best understood as an extension of its design philosophy: a balance of precision engineering and operational reliability. The company's stated goal is to deliver "peace of mind through excellence"—and its layered support ecosystem delivers precisely that.

From FalconCare's predictable maintenance coverage and FalconResponse's rapid AOG interventions, to FalconBroadcast's real-time troubleshooting and a global logistics chain that never rests, every element is designed to minimise downtime and enhance operator confidence. Dassault's insistence on maintaining significant in-house control over MRO facilities further underscores its commitment to quality and consistency.

The result is a service model that elevates Falcon ownership beyond aircraft performance alone. It ensures that every Falcon is backed by the manufacturer's full technical, logistical, and human resources—around the clock, across the world.

In a sector where time is the most valuable commodity, Dassault's investment in fleet support and customer service transforms aircraft ownership into a truly worry-free experience. As the company often notes in its communications, "the mission doesn't end when the aircraft lands—it continues with the support we deliver." And for Falcon operators, that enduring promise of support is perhaps the ultimate expression of Dassault's craftsmanship in aviation—one that extends far beyond the skies. SP



PRIME MINISTER NARENDRA MODI INAUGURATED SAFRAN'S STATE-OF-THE-ART LARGEST MRO HUB IN THE WORLD DEDICATED TO LEAP ENGINES, IN HYDERABAD, MARKING A MAJOR MILESTONE IN INDIA'S GROWING AVIATION ECOSYSTEM.

PHOTOGRAPHS: PIB

DEVELOPING A SUSTAINABLE DOMESTIC MRO ECOSYSTEM

India is expanding its civil aviation MRO infrastructure, but without deeper component repair capability, regulatory alignment and supply-chain control, it risks creating capacity without sovereignty and continued reliance on foreign maintenance ecosystems

By SWAATI KETKAR

INDIA IS ENTERING WHAT APPEARS TO BE ITS LONG-AWAITED engine MRO moment. With Safran establishing its flagship LEAP and CFM56 engine overhaul facility in Hyderabad, expanding airframe maintenance capacity across multiple airports, and a rapidly growing fleet pipeline driven by IndiGo, Air India and Akasa, the country appears to be on the cusp of a maintenance renaissance. Yet behind this optimism lies a more uncomfortable truth, India is not yet building a sovereign aircraft maintenance ecosystem. It is building infrastructure. It does not yet have control.

In global aviation, dominance is no longer defined by who manufactures aircraft, but by who controls maintenance pipelines, spares access, certification authority, manpower supply chains, turnaround reliability and Power-by-the-Hour (PBH) economics. These invisible levers decide fleet availability, airline profitability, military readiness and even national mobility resilience. And today, India controls very few of them.

COMPONENT MRO

A sustainable MRO hub is not defined by airframe hangars or engine test cells alone but it is defined by component repair den-

sity. India today has limited depth in high-value component categories such as fuel systems, pneumatics, actuation, avionics LRUs, landing gear accessories and environmental control systems.

This creates the condition of a 'missing middle' in the maintenance value chain. Aircraft may be checked in India, engines may be overhauled in India, but a large share of components still fly abroad.

Until component repair depth increases dramatically, India will struggle to achieve true lifecycle maintenance independence, and that is exactly why India's most serious MRO vulnerability is not engines, it is components. Giving his unbiased assessment on the topic, Sharad Agarwal, CEO, AI Engineering Services Limited (AIESL) says, "Today, it is nearly hundred per cent reliance on the overseas shops. Some of the OEMs are coming up with their shops, like Thales has come up for its shops, but then it is just the tip of the iceberg. The fact remains that most of the components are still going abroad."

Drawing a sharp historical contrast he continues, "Thirty years back, everything was done in-house by Air India and Indian Airlines. Even today, AIESL is having beautiful shops located in Delhi and Mumbai, but then for want of any jobs these shops are likely to get shut down. And not only that, the people who are having correct experience will also lose their experience and it will be a loss for India." In short, India is not losing buildings, it is losing capability memory and once experience disappears, rebuilding it takes decades.

Explaining the problem further, Anirrbban Bhattacharya, Director, Vector Technorium adds, "India is reasonably strong in line maintenance, base maintenance and select component repairs for A320 and B737 families… but when one looks at the entire lifecycle of an aircraft, the ecosystem is still incomplete." He further goes on to list critical gaps, "APU overhaul, advanced avionics, landing gear, composite and nacelle repairs, engine accessories and tyre retreading these drive the majority of lifecycle cost and downtime."

"India for now does not have enough depth to be categorised as completely independent… critical components such as bleed valves, ECUs, ADIRUs are yet to be explored," adds, Sajumon M.P., Head, AOG Desk, Lufthansa Technik India.

India's thin domestic rotable and LLP pools remain one of its most underestimated disadvantages. Chavan notes, "Unless we have large stocking such as surplus stocks similar to ones available in USA… the dependency on PBH will continue."

Prakash Babu Devara, Head of Aviation Marketing, APAC Sales, Ramco, quantifies the impact with sobering clarity, "With only around 15–20 per cent of India's commercial MRO serviced domestically and engine MRO largely overseas, local pools of rotables, LLPs, and engine components remain thin, stretching TAT and slowing AOG recovery. PBH pricing is less competitive versus global pools as operators face longer lead times and higher logistics costs." PBH dominance determines who controls fleets and by the looks of things today, India does not. At the heart of this lies a structural truth that engine MRO does not exist in isolation; it is an ecosystem business.

PHOTOGRAPH: AIESL

IN GLOBAL AVIATION, DOMINANCE IS NOW DEFINED BY WHO CONTROLS MAINTENANCE PIPELINES, SPARES ACCESS, CERTIFICATION AUTHORITY, MANPOWER SUPPLY CHAINS, TURNAROUND RELIABILITY AND POWER-BY-THE-HOUR (PBH) ECONOMICS

INDIA'S ENGINE MRO MOMENT

India is finally witnessing the emergence of domestic engine MRO facilities for CFM56, LEAP and other high-volume powerplants. On paper, this should mark a turning point by reducing foreign dependence, cutting costs and retaining billions of dollars in annual maintenance spend within the country. But then again, engine MRO is not simply about hangars, tooling or test cells.

A fully functional engine shop depends on a tightly integrated web of rotable and LLP pools, OEM-approved repair networks, high-speed customs clearance, predictable logistics corridors, data and tooling access, local component repair capability, and a deep bench of licensed manpower. In India, these layers still operate in silos. The result is an ecosystem that remains fragmented, a capacity that cannot scale with fleet growth, and an engine MRO sector that struggles to deliver the turnaround times, cost efficiencies, and reliability demanded by modern airline operations. While hangars are being built, material availability and repair development lag behind. This adds weeks to turnaround times, increases AOG exposure and weakens the commercial competitiveness of domestic engine shops even when labour costs are lower.

The arrival of Safran's Hyderabad engine MRO marks a watershed for India. Yet industry leaders caution that infrastructure alone does not equal ecosystem maturity. When asked when will India's MRO ecosystem mature, Ninad Chavan, CEO, Epsilon Aerospace candidly says that it will take some more years to build a complete ecosystem to support engine overhaul.

Seconding his thoughts Devara, says, "In my view, the real Engine MRO journey has just started in India. While the recent developments in OEMs setting up engine MRO shops and global MROs starting their operations to meet local demand is commendable progress, the broader support ecosystem still needs significant strengthening. Spares availability, component repair capabilities, and streamlined customs processes remain bottlenecks. Logistics and turnaround infrastructure are improving, but for high-volume engine and heavy maintenance work, consistency and speed are critical and these areas require deeper integration and investment before we can claim full readiness."

REGULATION

Despite progressive reforms, taxation, GST treatment, import duties on spares, and compliance costs continue to disadvantage domestic MRO versus foreign shops in subtle but cumulative ways.

Ironically, Indian airlines still often find it cheaper and faster to send aircraft overseas not because India lacks technical competence, but because the system surrounding maintenance still favours foreign ecosystems.

PHOTOGRAPH: LUFTHANSA TECHNIK / SONJA BRUEGGEMANN

INDIAN AIRLINES STILL OFTEN FIND IT CHEAPER AND FASTER TO SEND AIRCRAFT OVERSEAS NOT BECAUSE INDIA LACKS TECHNICAL COMPETENCE, BUT BECAUSE THE SYSTEM SURROUNDING MAINTENANCE STILL FAVOURS FOREIGN ECOSYSTEMS

Thus, India's biggest bottleneck is regulatory, not technical, Agarwal explains: "For doing any job on Indian-registered aircraft, the organisation has to be DGCA approved. CAR-66 requires that the engine CRS has to be issued by a licensed person, which is in deviation from EASA regulation. How do you get an Indian license holder who is having minimum two years' experience in engine overhaul environment? For at least the first two years, the organisation may have to continue running without DGCA approval, which defeats the purpose." Unless certification pipelines are modernised, India risks building global-grade hangars that cannot scale.

THE SUPPLY CHAIN WOES

Customs delays, documentation complexity, bonded warehouse constraints, re-export procedures and GST-related compliance continue to extend turnaround cycles, especially for AOG material movements. While policy reforms have improved certain processes, India still lacks the frictionless spares movement environment that is enjoyed by its neighbours Singapore, Dubai and Kuala Lumpur. In an industry where hours matter, days of delay become a strategic handicap.

As Indian carriers increasingly operate under PBH contracts and lease penalty regimes, even minor delays translate into major cost escalations directly undermining the value proposition of domestic MRO.

Thus, customs friction remains India's most persistent operational handicap. Chavan is blunt. He goes on to describe how customs clearance is still a nightmare to many MROs. "The concession and exemption are comparatively easier for operators than MRO," Chavan adds.

Stressing this further Devara says, "Delays in customs clearance, caused by complex tariff structures, inconsistent classification, and manual documentation, stretch AOG recovery and turnaround times. High logistics costs, limited bonded warehousing near airports, and weak multimodal connectivity add to inefficiency."

He outlines the necessary reforms, "Digitised, time-bound customs processes, fast-track AOG clearance, expanded bonded/free trade zones, integrated multimodal logistics corridors and shared inventory pools." In aviation, every extra day becomes a strategic disadvantage.

THE MANPOWER ILLUSION

India also faces a looming AME and technician supply constraint. Fleet growth has outpaced training capacity just as the licensing pipelines remain slow and experienced manpower is increasingly being absorbed by overseas operators offering higher compensation. Without urgent expansion of training pipelines, instructor capacity, and faster certification pathways, India risks becoming hangar-rich but manpower-poor.

Sharad Agarwal explains, "There are fifty odd schools producing approximately five thousand technicians per annum… there is no bottleneck in aircraft maintenance manpower but there is no basic training available in India which will train people towards engine or component maintenance."

Ninad Chavan adds, "The advantage of low labour cost is lost if TAT is more than those offered by other countries."

Bhattacharya's most strategic warning is on manpower and retention, "Top global hubs invest in structured, career-track training for engineers and AMEs aligned with international licences and OEM standards. India must equally address the growing attrition of trained personnel to overseas carriers. Otherwise, India risks becoming a training ground for export talent rather than a long-term aviation career destination."

LUFTHANSA TECHNIK HAS TAKEN OVER THE TOTAL COMPONENT SUPPORT (TCS) FOR AIR INDIA'S ENTIRE BOEING 777 FLEET. THE AGREEMENT INCLUDES THE MRO OF AIRCRAFT COMPONENTS AND PROVIDES AIR INDIA ACCESS TO LUFTHANSA TECHNIK'S GLOBAL COMPONENT POOL AND LOGISTICS SERVICES.

Elaborating further, Anirrbban Bhattacharya adds, "Lower labour cost is often cited as India's natural advantage, but labour represents only a small portion of total maintenance cost." Structural disadvantages dominate, "Higher inventory carrying costs, limited pooling access, regulatory dependency and ecosystem immaturity elongate turnaround cycles even when shop-floor capability exists."

CONCLUSION

India now stands at a threshold of upcoming MRO revolution. But the country, its politicians and all aviation stakeholders need to decide, it can either continue building hangars and hope ecosystems catch up or actually make a coordinated national push to develop spares pools, component repair depth, logistics corridors, manpower pipelines and OEM integration. The second path is the only one that will create sustainable aviation sovereignty.

Prakash Devara clarifies "Full MRO self-reliance is aspirational but not practical in the near term. The sustainable model is global integration with local strength."

To sum it up, Bhattacharya feels what India is facing is not MRO issue, but as an aviation–economics issue, "To be counted among the world's top five civil aviation MRO and broader aviation services hubs by 2030, India must take a holistic, ecosystem-level approach rather than looking narrowly at hangars and checks on aircraft. What global leaders such as Singapore, Dublin, Louisville, Amsterdam and Miami have shown is that aviation services are interlinked, MRO, leasing and financing, components, training, regulatory alignment and global platforms converge to create a compelling value proposition."

He stresses that control of high-value repairs, data access and regulatory alignment will define leadership, "Global MRO and component repair leadership only comes when OEMs are integrated into the value chain through formal partnerships, data licences and co-located advanced repair facilities. Without this, high-end LRUs, FADEC modules and composite repairs will remain structurally outside India."

> **Until component repair depth increases dramatically, India will struggle to achieve true lifecycle maintenance independence, and that is exactly why India's most serious MRO vulnerability is not engines, it is components**

Bhattacharya sums it up saying, "Aviation services are interlinked, for example MRO, leasing, components, training, regulatory alignment and global platforms must converge."

"To harness the anticipated $4 billion Indian MRO industry by 2030, tax and regulatory incentives, aggressive capital and infrastructure support and a nose-to-tail ecosystem are critical, Sajumon concludes.

By 2030, India will be operating one of the world's largest commercial fleets. Whether that fleet is maintained largely at home or remains structurally dependent on foreign MRO hubs will depend on the decisions made today. India has built the hangars but now time is ripe for the country to build its own control.

Because in aviation, the real power does not lie in who buys aircraft, it lies in who keeps them flying and India's real aviation race has only just begun. SP

PHOTOGRAPH: LUFTHANSA TECHNIK

MINISTER OF CIVIL AVIATION RAMMOHAN NAIDU AT THE OFFICIAL LAUNCH OF THE WINGS INDIA 2026 BROCHURE, THE PROMOTIONAL VIDEO AND THE OFFICIAL UNVEILING OF THE WINGS INDIA 2026 MOBILE APP, AIMED AT FACILITATING PARTICIPATION AND ENGAGEMENT FROM STAKEHOLDERS ACROSS THE GLOBE

INDIA TAKES CENTRE STAGE AT WINGS INDIA 2026

As India moves from scale to influence, Wings India 2026 reflects an aviation ecosystem poised to assume a leadership role in global civil aviation

By ROHIT GOEL

INDIA'S CIVIL AVIATION SECTOR IS PREPARING FOR A DEFINING moment as Wings India 2026 readies for take-off from January 28-31, 2026. The four-day event will bring together the global aviation community at a time when India's aviation market is expanding in scale, complexity and international relevance. Organised jointly by the Ministry of Civil Aviation, the Airports Authority of India and the Federation of Indian Chambers of Commerce and Industry (FICCI), Wings India has evolved into Asia's largest civil aviation exhibition and conference, reflecting India's growing influence across the global aviation ecosystem.

The event will be formally inaugurated in the presence of senior Indian leadership, including Minister of Civil Aviation Rammohan Naidu, alongside high-level dignitaries from India and abroad. The inauguration will signal the start of a global aviation gathering designed not merely to showcase aircraft and technology, but to position India as a long-term partner in shaping the future of civil aviation worldwide.

A VISION THAT SPANS THE ENTIRE AVIATION VALUE CHAIN

The official theme of Wings India 2026 — "Indian Aviation: Paving the Future – From Design to Deployment, Manufacturing to Maintenance, Inclusivity to Innovation and Safety to Sustainability" — reflects the breadth of ambition underpinning the event. It captures India's determination to strengthen every segment of civil aviation, from aircraft design and production to operations, maintenance, skilling and sustainability.

More importantly, the theme underscores a shift in focus from isolated growth to integrated development. It highlights India's aspiration to become a global hub not only for air transport, but also for aviation manufacturing, MRO services, innovation,

PHOTOGRAPH: PIB

talent development and sustainable aviation solutions. Inclusivity, safety and environmental responsibility are positioned not as secondary objectives, but as central pillars of future growth.

AN INTERNATIONAL GATHERING WITH INDIAN ROOTS

Wings India 2026 is expected to attract thousands of participants and high-level delegates, including ministerial-level foreign delegations and senior government officials. Official delegations from more than 20 countries are anticipated, reinforcing the event's international character and its role as a forum for cross-border collaboration.

The diversity of stakeholders expected in Hyderabad will span airlines, aircraft and engine manufacturers, airport developers, MRO providers, leasing firms, technology companies, training institutions, service partners and emerging start-ups. By bringing together policymakers, regulators, innovators and investors, Wings India 2026 aims to create a holistic picture of the civil aviation ecosystem.

EXHIBITION FLOORS AND SKIES ALIVE WITH AVIATION ACTIVITY

A central attraction of Wings India 2026 will be its expansive international exhibition, showcasing the latest developments across civil aviation. Aircraft manufacturers, component suppliers, airport infrastructure firms, MRO specialists, digital technology providers and advanced air mobility players will present their offerings, giving visitors insight into both current capabilities and future trends.

Static aircraft displays and flying demonstrations will add a dynamic dimension to the exhibition, offering close-up access to a wide variety of aircraft types. One of the key highlights will be aerobatic performances by the Surya Kiran Aerobatic Team of the Indian Air Force, bringing precision flying and spectacle to the event.

Dedicated exhibition zones, chalets and structured meeting areas will enable targeted business discussions, facilitating partnerships, commercial negotiations and long-term collaborations.

STRATEGIC DIALOGUE AT THE HEART OF THE EVENT

Complementing the exhibition will be a comprehensive conference and summit programme, positioning Wings India 2026 as a platform for strategic thinking and policy dialogue. The conference will feature 13 thematic sessions, along with a Global CEOs Forum and Ministerial Plenary, addressing the most pressing issues facing civil aviation.

Key topics will include airports and infrastructure, airline economics, helicopters, aircraft leasing, business aviation and small aircraft, air cargo, MRO, aircraft component manufacturing, sustainable aviation fuel (SAF), flying training and skilling, women in aviation, advanced air mobility and drones. Ministers, regulators, airline leaders, OEM executives and subject-matter experts will share perspectives on policy frameworks, market evolution and innovation pathways.

These discussions are expected to provide both strategic direction and actionable insight, helping stakeholders navigate regulatory challenges while identifying opportunities for growth and cooperation.

TURNING CONVERSATIONS INTO COMMERCIAL OUTCOMES

Beyond dialogue, Wings India 2026 places strong emphasis on structured business engagement. Dedicated B2B and B2G meeting formats will allow Indian stakeholders and international partners to engage in focused discussions on investment, joint ventures, technology transfer and market entry. Such interactions are designed to translate conversations into concrete outcomes, reinforcing Wings India's role as a catalyst for business development rather than a purely showcase-driven event.

An Aviation Job Fair will also form part of the programme, connecting industry leaders with young professionals and skilled talent. As India continues to scale up its aviation infrastructure and fleet, workforce availability and training remain critical priorities, and the job fair is expected to play an important role in addressing these needs.

INNOVATION, RECOGNITION AND CULTURAL ENGAGEMENT

Innovation and talent development will be highlighted through initiatives such as a Civil Aviation Innovation Challenge for students, aimed at encouraging problem-solving and industry-relevant thinking among the next generation. By exposing students to real-world aviation challenges, the initiative seeks to build a pipeline of future innovators.

The event will also host the Wings India Awards, recognising excellence and outstanding contributions across various segments of civil aviation. These awards continue a tradition of celebrating best practices, innovation and leadership within the sector.

Adding to the overall experience will be curated cultural programmes and networking events, offering delegates a glimpse of India's rich heritage while providing informal settings for interaction beyond formal business sessions.

> Wings India has evolved into Asia's largest civil aviation exhibition and conference, reflecting India's growing influence across the global aviation ecosystem

INDIA'S AVIATION STORY IN A GLOBAL CONTEXT

Wings India 2026 arrives at a pivotal moment for Indian aviation. As the world's third-largest domestic civil aviation market, India is expanding airport capacity, strengthening regional connectivity and building a skilled workforce at an unprecedented pace. These developments are attracting global attention from manufacturers, investors and service providers seeking long-term opportunities.

The event serves both as a mirror of India's progress and as a platform to shape what comes next. By bringing together global aviation leaders, policymakers and industry stakeholders, Wings India 2026 aims to influence future trajectories, foster partnerships and position India as a central player in the global aviation ecosystem.

A PLATFORM THAT LOOKS BEYOND 2026

More than an exhibition or conference, Wings India 2026 represents a convergence of vision, capability and ambition. It is a forum where ideas are debated, partnerships are forged and strategies take shape, against the backdrop of one of the world's fastest-growing aviation markets.

As Hyderabad prepares to host the global aviation community, Wings India 2026 is poised to reinforce India's standing not only as a major aviation market, but as a partner in shaping the future of civil aviation worldwide. SP

A300: THE FIRST AIRBUS

The Airbus A300 was a technological marvel, employing some of the advanced features of Concorde. The aim was to increase safety, operational capability, and profitability, and establish the airliner in a position of advantage vis-à-vis its prospective competitors.

THE POST-WORLD WAR II COMMERCIAL AVIATION SCENE WAS overwhelmingly dominated by giant US aerospace firms like Boeing, Lockheed Martin, and McDonnell Douglas. European companies lagged far behind, mainly because they were in competition with one another. Realising this, in September 1967, aircraft manufacturers from France, West Germany and the United Kingdom signed an initial memorandum of understanding to jointly develop a new large airliner. However, the project was politically fraught from the start, and the British withdrew in early 1969. Thereafter, despite their differences, the French and West Germans reached a firm agreement and a new aerospace company, Airbus Industrie GIE, was formally created in December 1970 to develop and produce passenger aircraft. In time, it attracted significant participation from Spain, the UK, Italy, and other nations, becoming a truly integrated European aerospace enterprise. The word 'airbus' was used as a generic term for a large commercial aircraft, as it was considered recognisable in multiple European languages.

Airbus Industrie was initially headquartered in Paris but was relocated to Toulouse in January 1974. The company's first product was the Airbus A300. The A300 prototype first flew on October 28, 1972, becoming the world's first twin-engine, wide-body (double-aisle) airliner. It was one of the most technologically advanced aircraft of the time. However, it also represented a huge gamble, since the fledgling Airbus consortium was directly challenging the might of the US aeronautical industry. The company pragmatically opted for English as the working language for the developing aircraft, as well as against using Metric instrumentation and measurements, as most airlines already had US-built aircraft that favoured Imperial units. This consultative approach, backed by market research, was a crucial factor in the company's long-term success.

The Airbus A300 was a technological marvel, employing some of the advanced features of Concorde. The aim was to increase safety, operational capability, and profitability, and establish the airliner in a position of advantage vis-à-vis its prospective competitors. A world first was the employment of composite materials on a commercial aircraft. These were used for both secondary and later primary airframe structures, decreasing overall weight and improving cost effectiveness. For instance, the composite fin was built at significantly lower weight and cost because it had less than 100 components against 2,000 for a metal fin.

The A300 normally seated 247 passengers in two classes. It had a range of 2,900 to 4,050 nm. The airliner's chief innovation was the twin-engine, wide-body concept, abandoning the existing triplet or quad-jet convention for large aircraft. In addition, the inclusion of underwing pods permitted the use of any suitable turbofan engine. Initial variants were powered by General Electric CF6-50 or Pratt & Whitney JT9D turbofans and had a three-crew flight deck. However, the improved A300-600 had updated General Electric CF6-80C2 or Pratt & Whitney PW4000 engines and a two-crew cockpit. The A300 was among the first airliners to have a glass cockpit, replacing traditional mechanical dials with electronic flight instrument displays.

Air France was the A300's launch customer and introduced the type on May 23, 1974. The airliner soon proved itself, offering impressive operational efficiency and setting new standards for medium-haul routes. Initial demand for the A300 was muted. But sales took off once the plane was proven in service. Indian Airlines was the world's first domestic airline to purchase the A300, ordering three aircraft with three options. What really boosted sales, was the introduction of ETOPS (Extended-range Twin-engine Operational Performance Standards) – safety rules that allow twin-engine jets to fly long routes, far from diversion airports, especially over the ocean, while ensuring that they can reach an alternative airport despite having one engine out. In 1977, the A300B4 became the first ETOPS compliant aircraft, due to its high performance and safety standards. The final version, the A300-600R, was rated for 180-minute ETOPS.

In the 1990s, the A300 gained popularity as a cargo aircraft. In fact, Airbus claims that it is the bestselling freight aircraft ever. Production ceased in July 2007 after 561 deliveries. As of early 2026, there are over a hundred A300 family aircraft still in commercial service. Of these, around seven are in passenger service in Iran, while the rest are pure freighters, forming the backbone of some global cargo networks.

The A300 radically altered the competitive landscape of commercial aviation. And it established a firm foundation for Airbus's later success as a global aerospace giant. So much so that in October 2025 a later Airbus product – the Airbus A320 family – overtook the Boeing 737 family as the most-delivered jetliner with 12,260 deliveries till then. This monumental achievement of Airbus Industrie came just 51 years after the A300 entered commercial service. SP

— JOSEPH NORONHA

MILITARY

DRDO SUCCESSFULLY COMPLETES USER EVALUATION TRIALS OF AKASH-NG

Defence Research and Development Organisation (DRDO) has successfully completed the User Evaluation Trials (UET) of Next Generation Akash missile (Akash-NG) system. During the trials, the missiles successfully intercepted aerial targets at different range & altitude including the near-boundary-low-altitude and Long Range, high altitude scenarios. The trials were witnessed by Senior Scientists of DRDO & User Reps from the Indian Air Force (IAF).

DRDO CONDUCTS SUCCESSFUL GROUND TEST OF SCRAMJET ENGINE FOR HYPERSONIC MISSILE PROGRAMME

Defence Research & Development Laboratory (DRDL), the Hyderabad-based laboratory of the Defence Research and Development Organisation (DRDO), has achieved a path-breaking milestone in the development of Hypersonic Missiles. The DRDL successfully conducted an extensive long-duration ground test of its Actively Cooled Scramjet Full Scale Combustor, achieving a run time of over 12 minutes at its state-of-the-art Scramjet Connect Pipe Test (SCPT) Facility on January 9, 2026.

This significant achievement builds upon the earlier subscale test conducted on April 25, 2025, for long duration, marking a crucial step forward in Hypersonic Missiles development. The Combustor and test facility were designed and developed by the DRDL and realised by industry partners. The successful test positions India at the forefront of advanced aerospace capabilities.

DRDO SUCCESSFULLY CONDUCTS SALVO LAUNCH OF TWO PRALAY MISSILES

Defence Research & Development Organisation (DRDO) has successfully conducted salvo launch of two Pralay missiles in quick succession from the same launcher off the coast of Odisha on December 31, 2025. The flight-test was conducted as part of user evaluation trials. Both the missiles followed the intended trajectory meeting all flight objectives as confirmed by tracking sensors deployed by the Integrated Test Range, Chandipur. The terminal events were confirmed by Telemetry systems installed onboard ship, deployed near the impact points.

Pralay is an indigenously developed solid propellant quasi-ballistic missile employing state-of-the-art guidance and navigation to ensure high precision. The missile is capable of carrying multiple types of warheads against various targets.

APPOINTMENTS

AIR MARSHAL NAGESH KAPOOR TAKES OVER AS VICE CHIEF OF THE AIR STAFF, INDIAN AIR FORCE

Air Marshal Nagesh Kapoor took charge as the Vice Chief of the Air Staff, Indian Air Force on January 1, 2026. During his distinguished flying career, he has flown all variants of the MiG-21 and the MiG-29 and has accumulated over 3400 hours of flying experience on a variety of combat and trainer aircraft. Prior to assuming charge as the Vice Chief of the Air Staff, the Air Marshal served as the Air Officer Commanding-in-Chief, Training Command, and thereafter as the Air Officer Commanding-in-Chief, South Western Air Command.

AIR MARSHAL TEJINDER SINGH TAKES OVER AS AIR OFFICER COMMANDING-IN-CHIEF SOUTH WESTERN AIR COMMAND, INDIAN AIR FORCE

Air Marshal Tejinder Singh took over as Air Officer Commanding-in-Chief (AOC-in-C), South Western Air Command on January 1, 2026. He is a Category 'A' Qualified Flying Instructor with over 4500 hours of flying, an alumnus of Defence Service Staff College and National Defence College. Prior to his present appointment, he was the AOC-in-C, Training Command, IAF.

AIR MARSHAL S. SHRINIVAS TAKES OVER AS AIR OFFICER COMMANDING-IN-CHIEF TRAINING COMMAND, INDIAN AIR FORCE

Air Marshal Seethepalli Shrinivas took over as Air Officer Commanding-in-Chief (AOC-in-C), Training Command, Indian Air Force on January 1, 2026. He is a 'Category A' Qualified Flying Instructor with over 4200 hours of flying experience. He is also qualified as a 2nd pilot on Chetak / Cheetah helicopter and a categorised Operations Officer on the Pechora missile system. Prior to his current assignment, he was the Senior Air Staff Officer at HQ SWAC.

GE AEROSPACE APPOINTS SHILPA GUPTA AS CHIEF TECHNOLOGY OFFICER, INDIA

GE Aerospace has appointed Shilpa Gupta as the new Chief Technology Officer for GE Aerospace in India and the Site Leader for the John F. Welch Technology Centre (JFWTC) in Bengaluru. In this role, Shilpa will lead the company's engineering, research, and digital technology teams at Bengaluru.

CIVIL

HAL'S DHRUV HELICOPTER MARKS ENTRY INTO CIVIL AVIATION

HAL's Dhruv New Generation (NG) helicopter successfully completed its inaugural flight, marking HAL's firm entry into the civil aviation helicopter sector and a significant milestone in India's journey towards 'Atmanirbharta' in civil aviation. Minister of Civil Aviation flagged off the inaugural flight. Dhruv NG is progressing well towards full civil certification in the next three to four months.

During the event, HAL also received the Certification of 'Indigenous manufacturing of Shakti Civil Engine' from the Directorate General of Civil Aviation (DGCA). This is the first time that an aero engine has been certified by DGCA for indigenous production, representing a major leap forward in India's self-reliance in critical technologies. ●