

A SUPPLEMENT TO SP'S AVIATION



BIZAV INDIA

VOLUME 10 • ISSUE 2

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(EX-COO OF SPICEJET)
LAUNCHES AIR CHARTER
BUSINESS

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NEXTGEN IN SKIES

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GULFSTREAM'S G700 DELIVERY BEGINS LESS
THAN A MONTH OF FAA CERTIFICATION

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ON THE COVER:

Boasting of the most spacious cabin in the industry, the Gulfstream G700 offers an award-winning flexible interior with elegant finishes, advanced cabin controls and all-new handcrafted seats for exceptional comfort on ultralong-range flights.

Cover Photograph:
Gulfstream

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SPPublications

**SP GUIDE PUBLICATIONS****FROM THE EDITOR-IN-CHIEF**

BAOA and SP Guide Publications extend a warm welcome to India's New Civil Aviation Minister Kinjarapu Ram Mohan Naidu & Minister of State for Civil Aviation Murlidhar Mohol and look forward to working with them for the development of General Aviation and Business Aviation sector in India.

Dear Reader,

In this edition of *BizAvIndia*, we have an insightful letter from Harsh Vardhan Sharma, President of BAOA, addressing critical issues in General Aviation and Business Aviation (GA/BA). Sharma highlights BAOA's ongoing efforts to resolve itemised ground handling charges for NSOP/GA at public airports and the push to abolish the 2.5 per cent import duty on NSOP aircraft, alongside addressing GST-related concerns.

Business aviation plays a crucial role in economic development, community support, technological advancement, and humanitarian efforts. Sudhir Rajeshirke's article delves into these contributions, emphasising the positive impact of general aviation on modern society. In another feature, Swaati Ketkar explores how BA/GA can be a catalyst for economic growth and by acknowledging the economic and social advantages of business aviation and enacting supportive policies, governments can cultivate an environment conducive to growth and bolster the overall economy.

Gulfstream Aerospace has commenced customer deliveries for the highly anticipated Gulfstream G700, marking a new chapter in business aviation, with the delivery of two aircraft to Qatar Executive making them the first Gulfstream customer of this ultra-modern aircraft, featuring bespoke cabins designed to meet the highest standards. The aircraft had just recently received both FAA and EASA type certifications, unlocking deliveries for many international customers and confirming performance enhancements for range, speed, and cabin altitude. Rohit Goel reports on this significant milestone for Gulfstream Aerospace in the issue.

This edition also features Ayushee Chaudhary's comprehensive report on EBACE 2024, Europe's premier business aviation event showcasing the latest advancements in BizAv technologies. This year's gathering wasn't just about the industry's progress but served as a launchpad for the future with a core focus on the exciting world of Advanced Air Mobility (AAM) – electric, hydrogen, and hybrid-powered vehicles poised to revolutionise transportation. Attendees witnessed a flurry of significant deals, captivating aircraft displays, and groundbreaking announcements. Sustainability was another major theme, with companies showcasing advancements that aim to minimise the environmental impact of business aviation.

In an exclusive interview, Arun Kashyap discusses the underserved nature of India's charter segment, announcing his new venture, Sirius India Airlines, in partnership with UAE-based Airavat Aviation. This move promises to address the gaps and set new benchmarks in the private charter market.

Starting this issue, we've implemented a new, reader-friendly font for improved readability. We hope you will enjoy the new reading experience!

All this and more in this issue of *BizAvIndia*. Welcome aboard and we wish you many happy landings!

J. Baranwal
Editor-in-Chief



PRESIDENT



BUSINESS AIRCRAFT OPERATORS ASSOCIATION

Dear Members,

Despite the challenges posed by the recently concluded parliamentary elections, BAOA has persistently engaged with the government to address the industry's pending issues related to General Aviation/Business Aviation (GA/BA).

We have once again raised the issue of itemised ground handling charges for NSOP/GA at all public airports, a crucial decision highlighted by the Civil Aviation Minister during the December 2023 meeting with BAOA and other industry representatives. Additionally, we are continuing our efforts to abolish the 2.5 per cent import duty on NSOP aircraft. Members should note that the original circular from 2009 included a sunset clause of fifteen years, offering an opportunity for this unjustified duty, that adversely affected the growth of GA/BA segment, to be discontinued after March 2024.

We plan to vigorously pursue this matter with the government and expect all members to support this effort in every possible way. This issue requires persistent attention and determination to achieve a favourable outcome.

Just before the conclusion of the parliamentary elections, a meeting was held on May 28, 2024 under the Chairmanship of the Secretary of the Ministry of Civil Aviation. This was a National Aviation Committee meeting of FICCI, where BAOA, as a permanent member, addressed important pending issues, including GST-related concerns, which need to be tackled within the new government's 100-day action plan. The ongoing proposal for well-established regulations, ensuring prior scrutiny by taxation authorities, for fractional ownership in the NSOP/GA industry was finalised during a significant meeting with MoCA. We will now follow up for expedited implementation of these new guidelines. It is anticipated that our industry will experience accelerated growth once the fractional ownership model is fully implemented in India.

The first India Aviation Summit took place in Delhi on May 12th and 13th. We are looking for opportunities for a more focused and participative engagement for the second summit planned for later next year. In the first summit, BAOA played a leading role, with focused discussions on the GA/BA industry in India, in which BAOA members actively participated.

Members, we must continue our efforts with the new government with renewed energy to address our issues as quickly as possible. I request all members to keep providing valuable input to the Managing Director, BAOA, enabling us to present well-informed and thoroughly researched documents to the Ministry and other regulators to pursue our issues most objectively and forcefully.

My best wishes and happy landings!


Harsh Vardhan Sharma
President, BAOA.





Business Aviation — A Force for Good

BY SUDHIR RAJESHIRKE

Business aviation is part of General aviation and plays a vital role in fostering economic development, supporting communities, advancing technology, and facilitating humanitarian efforts

EMERGENCY MEDICAL SERVICES (EMS) USING BUSINESS AIRCRAFT OR HELICOPTERS CAN SPUR MASSIVE HUMANITARIAN EFFORTS IN THE COUNTRY, ADDRESSING CRITICAL NEEDS DURING EMERGENCIES AND NATURAL DISASTERS



PHOTOGRAPH: HondaJet

AMONGST THE GENERAL PUBLIC, business aviation is often regarded as a luxury or niche sector of aviation and hence doesn't receive the responsiveness and assistance from the Government and State entities that it truly deserves. The reason is that not many are aware that business aviation is part of general aviation that encompasses a wide range of activities from private flying to aerial surveys, emergency medical services, general aviation terminals often known as Fixed Base Operators (FBOs) and police surveillance etc.

General aviation thus serves as a crucial force for good in numerous aspects of modern society. Often overshadowed by commercial and military aviation, general aviation plays a vital role in fostering economic development, supporting communities, advancing technology, and facilitating humanitarian efforts.

Hence as the Ministry of Civil Aviation (MoCA) with new leadership is in the process of developing new initiatives to further the aviation sector, it would be worthwhile to recognise that the general aviation is a force for good and hence here are four initiatives that the Ministry can focus on to provide immediate revival for the general aviation industry.

• **Aircraft Fractional Ownership**

Framework: At its core, business aviation enhances efficiency and productivity in ways that commercial aviation cannot always match. By providing companies and individuals, entrepreneurs and business leaders with direct, flexible, and rapid transportation options, it enables executives, experts, and decision-makers to reach their destinations swiftly and on their own schedules. This agility translates into faster decision-making processes, increased face-to-face interactions crucial for business deals and relationships, and the ability to respond swiftly to emergencies and opportunities alike. This makes a business jet or a helicopter as essential tool for business aviation.

However, there are two key challenges in owning and operating business aircraft. First, the differential taxation between commercial and private categories of aircraft encourages companies to consider importing and operating aircraft under commercial category. However, there is another hurdle. To operate just one aircraft, companies have to establish an aviation company, that is not their core business. Further, considering the amount of flying i.e. under 200 hours per year, it does not make commercial sense for a lot of companies to invest in purchasing a full aircraft. All these factors discourage companies in using business aviation altogether. Hence the industry growth has been flat for the last two decades.

Aircraft fractional ownership model solves all the challenges above. First, the companies have to invest only a fraction of the cost of aircraft. This reduces their CAPEX investment and hence more companies would find it affordable to acquire an aircraft. Secondly, the responsibility of operation is assigned to a professional aviation company. This removes second hurdle of operat-

ing and managing a complicated aviation asset. Finally, the overall cost of flying is reduced and service standards are improved.

Due to several customer favorable factors, aircraft fractional ownership programmes is likely to significantly improve the fleet strength of both business jets and helicopters in India. These aircraft will likely be deployed for religious flying, NGO efforts and other humanitarian purposes.

Since last two years, Business Aircraft Operator Association (BAOA) has been working with MoCA to create a framework under which the fractional model can be implemented. The framework is ready and hence MoCA can release the framework and thus roll out implementation of the well-known and well accepted business model that will increase business aircraft ownership in India.

• **Emergency Medical Services (EMS):** For a population of 1.4 billion people, there are fewer than ten helicopters and business aircraft that are currently used for emergency medical services. This is an abysmal figure for a vast country such as India. According to official statistics published by the Ministry of Road Transport and Highways (MoRTH), 1,53,972 persons were killed in road crashes in the year 2021. The medical infrastructure in tier 2 and tier 3 cities is limited. Hence for patients to access high quality medical services in case of emergencies becomes a challenge. Further, during natural disasters, especially in the mountainous regions, there is very limited capacity to the relief agencies to rescue people in distress. Organisations like NGOs, relief agencies, and medical teams rely on business aviation to access regions where infrastructure may be limited or compromised, demonstrating its crucial role in humanitarian logistics.

This is the second area where MoCA can spur the next level of growth for emergency medical services. However, what currently prevents the availability of general aviation aircraft for emergencies is the lack of scalable business model that would encourage private companies to provide EMS. Hence there is a need for the States to invest in such EMS programmes through public private participation. MoCA has initiated a Sanjeevani programme in which a pilot HEMS project will soon be launched at AIIMS Rishikesh. However, more needs to be done and soon. MoCA needs to encourage States to launch their own EMS programmes using a broad framework used in MoCA pilot project.

EMS programmes can be launched in two models by the States. In first model, States can lease a helicopter or a business aircraft that is fully EMS equipped from an existing operator. Fixed guaranteed hours per month can be provided so that the operator can cover the fixed costs per month and make a reasonable profit from the asset. The operator can either purchase an aircraft or use an existing one from the fleet and configure it to provide EMS. This model helps any State to launch an EMS programme quickly along with an experienced operator. The second model is one which the State can itself launch the programme using its own aviation department. A State can purchase or lease an aircraft, configure



THE MINISTRY OF CIVIL AVIATION (MOCA) WITH NEW LEADERSHIP IS IN THE PROCESS OF DEVELOPING NEW INITIATIVES TO FURTHER THE AVIATION SECTOR, RECOGNISING THAT GENERAL AVIATION IS A FORCE FOR GOOD.



GENERAL AVIATION (GA) TERMINAL AT MUMBAI AIRPORT. INDIA REQUIRES WORLD-CLASS INFRASTRUCTURE OF GENERAL AVIATION TERMINALS (GAT) OR FIXED BASE OPERATORS (FBO), WHICH OFFER ESSENTIAL SERVICES FOR THE OPERATION OF GENERAL AVIATION AIRCRAFT.

it for EMS operations and launch its own services for the State. The aircraft can also be loaned to other States for relief efforts. The States have the financial capacity and people to launch EMS quickly without the need to think of financial returns.

Thus, the EMS using business aircraft or HEMS using helicopters can spur massive humanitarian efforts in the country.

- **Police Surveillance:** Police surveillance using helicopters is a not known concept in India, but one that needs attention as it provides significant benefits to society by enhancing law enforcement capabilities, improving public safety, and aiding in emergency response situations. Helicopters are useful in several ways for police surveillance such as enhanced situational awareness on ground for monitoring large areas quickly and effectively, crime prevention and detection, emergency response and disaster relief activities, and public event and crowd control.

In summary, police surveillance using helicopters is a critical tool that enables law enforcement agencies to enhance public safety, respond effectively to emergencies, and support various aspects of community policing. By leveraging aerial capabilities, police can better protect communities, prevent crimes, and provide swift assistance during crises, ultimately contributing to a safer and more secure society.

The strategy to implement at State level is for MoCA to engage with State police agencies and follow the two models that are recommended for HEMS operations above.

- **General Aviation Terminals and Dedicated Space for GA Aircraft at Airports:** This is a large untapped market that needs highest priority. Mumbai is an excellent example in which there is high concentration of wealth and has a high demand from business aircraft, but has very minimal parking space and support function areas. Hence the demand for general aviation flights has stagnated.

India requires a worldclass level infrastructure of General Aviation Terminals (GAT) or Fixed Based Operators (FBO) which number less than five in India. GATs or FBOs offer a range of services that include fueling, maintenance, ground handling, parking and other facilities that are essential for operation of general aviation aircraft. Hence when Airport Authority of India (AAI) plans new airports or considers expansion of existing ones, parking space should be allocated for business aircraft for current and future aircraft inductions. A dedicated space should also be allotted to small or large FBO depending on historical and potential business aviation traffic. Promoting business aviation should now figure in the civil aviation policy making process as well.

Promotions by Local State Governments. State Governments have their own internal need for private aircraft (fixed wing or helicopter) travel and many have a dedicated civil aviation department. The civil aviation department can build small FBOs at airports where there is significant State and private aircraft travel. A saying goes “Build and they will come”. Once State officials, business persons experience the ease of rapid checking through an FBO, they will prefer it over commercial terminal any day.

In conclusion, business aviation transcends its luxury image to become a vital force for good in today's interconnected world. From enhancing business efficiency and supporting humanitarian efforts to driving economic growth and technological innovation, its impact is diverse and profound. As the sector continues to evolve, embracing sustainability and innovation, its positive contributions to global connectivity and prosperity are set to grow, making it an indispensable element of modern aviation and economic development. [BAI](#)

Sudhir Rajeshirke is an experienced executive in the business and general aviation industry and is passionate about growing the aviation industry in India.



GULFSTREAM G700'S AWARD-WINNING INTERIORS FEATURE THE MOST SPACIOUS, INNOVATIVE, AND FLEXIBLE CABIN IN THE INDUSTRY

A New Era in Business Aviation

BY **ROHIT GOEL**

Gulfstream begins G700 customer deliveries

GULFSTREAM AEROSPACE HAS ANNOUNCED a significant milestone with the commencement of customer deliveries for the highly anticipated Gulfstream G700. The first two G700 aircraft have been delivered and are now operational, marking a new chapter in business aviation.

"Beginning G700 customer deliveries less than one month after achieving Federal Aviation Administration (FAA) type certification marks an incredible milestone in Gulfstream's history of raising the bar for the business aviation industry," said Mark Burns, President, Gulfstream. "We appreciate the confidence our customers have

PHOTOGRAPHS: Gulfstream

demonstrated in our aircraft and look forward to continuing these deliveries in the weeks ahead.”

The G700 truly represents the future of private air travel, offering a superior flying experience with unrivalled design, technology, comfort and style. The aircraft offers an exceptionally spacious passenger cabin consisting of four individual living areas including a dedicated private rear stateroom with a permanent fixed bed. The G700 features the Gulfstream Cabin Experience with whisper-quiet noise levels, natural light from 20 Gulfstream Panoramic Oval Windows and the industry's lowest cabin altitude. The G700 also prioritises passengers' comfort with 100 per cent fresh air replenished every 2-3 minutes, and an ionizing system for the cabin air providing the highest air quality possible today in a business jet. This ensures they arrive more refreshed than with any other aircraft type.

The all-new Gulfstream G700 has the distinction of surpassing 50 city-pair speed records prior to entering service. “We are excited for our customers to experience the unparalleled G700 as we continue to deliver this exceptional aircraft around the world,” said Burns. The G700 achieved its 50th speed record on a carbon-neutral flight connecting Los Angeles to Nice, France, traveling 5,197 nautical miles/9,625 kilometres in 10 hours and 13 minutes at an average speed

seeing our guests on board soon to experience this technologically advanced aircraft.”

The bespoke cabins have been designed and meticulously crafted to meet Qatar Executive's most discerning customers' standards. The passenger experience has been augmented to include a revolutionary lighting system, the industry's lowest cabin pressure altitude and natural lighting through 20 windows.

Qatar Executive expects an additional eight G700's to be delivered in the near future, with two already delivered and two more due to delivery within weeks. The new G700 fleet has entered full commercial service in June with Qatar Executive taking expressions of interest from clients to charter the new aircraft.

GULFSTREAM G700 RECEIVES EASA TYPE CERTIFICATION

Earlier, on May 15, 2024 Gulfstream Aerospace announced that the all-new Gulfstream G700 has received European Union Aviation Safety Agency (EASA) type certification, following the aircraft's Federal Aviation Administration (FAA) type certification on March 29.

“The Gulfstream team is proud to add EASA to our growing G700 certification accomplishments,” said Mark Burns, President, Gulfstream. “During the flight test programme, we took the G700 across the globe, and the response to the aircraft's



**“BEGINNING G700 CUSTOMER DELIVERIES LESS THAN ONE MONTH AFTER ACHIEVING FEDERAL AVIATION ADMINISTRATION (FAA) TYPE CERTIFICATION MARKS AN INCREDIBLE MILESTONE IN GULFSTREAM'S HISTORY OF RAISING THE BAR FOR THE BUSINESS AVIATION INDUSTRY,”
— MARK BURNS, PRESIDENT, GULFSTREAM**

of Mach 0.90. The industry-leading aircraft then set its 51st speed record — also a carbon-neutral flight — from Nice to Singapore, making the 5,754 nm/ 10,656 km trip in just 11 hours and 30 minutes at an average speed of Mach 0.90. The latest record-breaking flights were a fast follow to a city-pair record set by the award-winning G700 on a trip from Tokyo to Savannah in December 2023. The new ultralarge-cabin aircraft made the 6,365- nm/11,788-km journey in 10 hours and 53 minutes at an average speed of Mach 0.91.

QATAR EXECUTIVE WELCOMES THE WORLD'S FIRST GULFSTREAM G700

Qatar Executive, the Qatar Airways subsidiary, was the first Gulfstream customer to receive delivery of the aircraft and is currently the only international operator of the ultra-modern G700 on a private charter basis.

Qatar Airways Group Chief Executive Officer, Engr. Badr Mohammed Al-Meer said, “We welcome the industry's highest performance ultra-long-range business jet, Gulfstream G700 aircraft to the Qatar Executive fleet. We are proud to enhance our existing fleet of 15 Gulfstream G650ER aircraft to include the pinnacle of business aviation excellence and look forward to

cabin size, flexibility and performance has been outstanding. This EASA certification unlocks G700 deliveries for many more of our international customers, and we are excited to see our next-generation fleet grow around the world.” “We appreciate the support and partnership of the EASA G700 certification team in reaching this achievement,” said Burns.

Before FAA certification, Gulfstream announced G700 performance enhancements for range, speed and cabin altitude. The aircraft's range increased to 7,750 nautical miles/14,353 kilometres at Mach 0.85 or 6,650 nm/12,316 km at Mach 0.90, gaining 250 nm/463 km at both speeds over original projections. The G700's maximum operating speed increased from Mach 0.925 to Mach 0.935, making it the fastest in the Gulfstream fleet. Its cabin altitude, already the lowest in business aviation, was reduced to 2,840 ft/866 m while flying at 41,000 ft/12,497 m, providing even more comfort for passengers.

In addition, the G700's FAA certification confirmed two additional performance improvements, giving customers even more operational flexibility and airport availability: a balanced field length take-off distance of 5,995 ft/1,829 m and a landing distance of 3,150 ft/960 m (standard ISA day, sea level), both shorter than originally announced.

GULFSTREAM G700 RANGE



Source: Gulfstream

GULFSTREAM G700 EARNS ADDITIONAL FAA CERTIFICATIONS

Gulfstream Aerospace, on April 8, 2024, had announced that the all-new Gulfstream G700 has earned additional Federal Aviation Administration (FAA) certifications following the G700 FAA type certification on March 29. The new production and interior supplemental type certifications further clear the G700 for customer deliveries and entry into service.

The G700 cabin supplemental type certifications officially approve the interior outfitting of the G700 and its cabin air purification system. The FAA production certification (PC) confirms that Gulfstream's production processes for the G700 are compliant with federal aviation regulations. The FAA issued the PC after an extensive audit of Gulfstream's engineering, supplier, manufacturing and quality systems to ensure the aircraft will be produced in accordance with the FAA-approved design.

"Receiving these additional clearances so quickly on the heels of FAA type certification showcases how mature the G700 programme is," said Mark Burns, president, Gulfstream. "Thanks to the investments made in advanced manufacturing and interior innovations, operators will benefit from the industry leading quality, fit and finish of the G700. We look forward to our

customers experiencing firsthand the cabin comfort and performance capabilities of this fine aircraft."

The G700 is manufactured at Gulfstream's Savannah headquarters along with all ultra-large and large-cabin aircraft. Production methods for the next-generation Gulfstream fleet were designed with the Savannah-based research and development team and include advanced automation, 3D model designs, and robotic and bonding techniques that result in unprecedented quality and precision.

A TESTAMENT TO INNOVATION

Welcome the next-generation Gulfstream G700 as it takes to the skies. Less than a month after achieving FAA certification, the first two aircraft have officially been delivered to customers with many more to follow. The Gulfstream G700 has unquestionably set a new standard for luxury, performance, and comfort in the ultra-large-cabin segment. With deliveries well underway and EASA certification secured, the G700 is poised to dominate the skies for years to come. The G700's success is a culmination of Gulfstream's commitment to innovation, guaranteeing exceptional quality and precision in every aircraft produced. [BAI](#)



AS INDIA'S ECONOMY CONTINUES ITS UPWARD TRAJECTORY, INCREASING ATTENTION IS BEING SOUGHT TOWARDS THE GENERAL AVIATION (GA)/BUSINESS AVIATION (BA) SECTORS FOR THEIR INDISPENSABLE CONTRIBUTIONS TO THE NATION'S DEVELOPMENT

A Catalyst for **Economic Growth**

BY SWAATI KETKAR

Business Aviation is crucial to the growth of an economy and by recognising the economic and social benefits of business aviation and implementing supportive policies, governments can create an environment that fosters growth and strengthens the overall economy

AS INDIA'S BUSINESS AVIATION industry embarks on its evolutionary journey, the synergy between innovation, government policies, and unwavering demand sets the stage for a transformative decade and beyond. Imagine a world where business moves at the speed of a private jet. No more missed connections or wasted hours in crowded terminals. Business aviation cuts through these limitations, becoming a powerful engine for economic growth. By whisking executives, specialists, and essential cargo directly to their destinations, business jets unlock a new level of efficiency. Deals close faster, projects run smoother, and businesses gain a wider global reach. This fosters international trade, foreign investment, and collaboration, propelling economies forward. But the benefits extend beyond just business.

Business aviation also plays a critical role as an essential

service. It allows doctors to reach remote patients in a medical emergency, delivers vital equipment to disaster zones during critical moments, and transports energy exploration teams to previously inaccessible locations. It ensures business continuity during crises by allowing essential personnel and VIPs to bypass disruptions to commercial travel. In underserved communities lacking regular flights, business aircraft become lifelines, connecting them to the wider world and facilitating the delivery of vital services.

To ensure this critical sector thrives, government support is essential. Investing in infrastructure improvements at general aviation airports makes business travel smoother and safer. Streamlining regulations and procedures reduces administrative burdens, while tax incentives for sustainable aviation fuels and new technologies encourage environmental responsibility and innovation. By fostering a supportive environment for business

aviation, governments can unlock its full potential to drive economic growth, societal well-being, and the efficient movement of VIPs who play a vital role in various industries.

POST-PANDEMIC GROWTH IN BUSINESS AVIATION – MODEST OR HIGH?

The business aviation craze mostly started post COVID-19 pandemic with cooped up people ready to splurge in luxury and keep their families safe from the potential infections by travelling in private jets. Speaking on the post-pandemic demand of private charters, Rajan Mehra, Chief Executive of Club One Air, goes on to explain that the demand has been exponential. "Most charter companies have clicked very impressive growth. We at Club One Air have seen an extremely encouraging growth of 75 per cent both on hours clocked and revenues," Mehra asserts.

"Once you start flying business, you rarely go back to economy provided you can afford it," says Colonel Sanjay Julka, Industry veteran and business aviation expert, Chief Executive, Technical at AR Airways. "During the pandemic, people were facing financial hardships. Those who migrated from First class to Private did so because they could afford it. Hence if affordability is not an issue, majority of these people, in fact 75-80 per cent of them will continue to fly business aviation charter planes," adds Julka.

Explaining the market dynamics Jaideep Mirchandani, Chairman Sky One, states:

- Firstly, the resumption of commercial flights has provided travellers with more options, impacting the exclusivity and perceived necessity of private charters.
- Secondly, economic uncertainties stemming from the pandemic have led to a cautious approach among businesses and individuals, influencing their travel preferences and budgets.

Going ahead, Mirchandani anticipates a gradual recovery and growth trajectory for the business aviation sector in India. "As the economy rebounds and travel restrictions ease further, we expect renewed interest and investment in private charters, especially for corporate travel and niche segments such as medical evacuations and luxury tourism," Mirchandani adds.

INDIAN 'EVENTS' LEADING UP TO BOOM IN BUSINESS AVIATION SECTOR

One most interesting part of the Cricket world cup 2023 hosted by India was the huge demand of private charters during some of the most important matches like the India-Pakistan or the India-Australia final match. On an average day, the Ahmedabad airport, run by the Adani Group, sees seven to eight arrivals and departs each handling a total of 16 private chartered flights. Just a month prior, on October 12-13 during the India-Pakistan match the airport recorded a whooping 30 departures and 29 arrivals.

Prior to the cricket world cup was the much-anticipated FIFA World Cup 2022 during which Indian soccer fans were in a frenzy to book private charters for their favourite game in UAE. The idea was to return after the match on the same day, thus saving time and hotel expenses.

Apart from cricket, the newly constructed Ayodhya airport handled about 101 charter flights in the two days leading up to the inauguration of the Ram Mandir ceremony with the airport handling over 39 private jets in less than 30 hours recording 350 VVIPs including Bollywood celebrities, business tycoons, artists, sports person etc. The rush was intense as the charters had to hover for over half an hour awaiting clearance.

After Cricket and religion comes weddings and the latest Ambani pre-wedding bash in Jamnagar broke all records of private charter moment in the small military airport of Jamnagar with the airport handling approximately over 400 charter flights in the weekend celebrations in the first week of March 2024.

Following wedding another theme that drives India is politics and as the final countdown to the 2024 Lok Sabha elections has kicked off, the private charter industry is bracing for a huge surge in demand for the upcoming rallies and political campaigns across the country. Charter companies are already facing multiple bookings especially for twin-engine helicopters recording an almost 300 per cent surge as compared to the rest of the year.

Anticipating a further surge in private charter demand, Rajan Mehra calls the events as Bonanza for private jet companies. "The upcoming elections will further add to the profits of charter companies," Mehra adds.

Echoing Mehra's thoughts, Jaideep Mirchandani, Chairman Sky One called these events as catalysts for heightened demand as individuals and organisations seek efficient and exclusive travel solutions to attend these gatherings.

WHAT CAN THE GOVERNMENT CHANGE TO GROW BUSINESS AVIATION?

Sanjay Julka, CEO of AR Airways has highlighted certain policies that Indian government can amend to give a boost to

Indian aviation industry. They are:

- Removing restriction of 18-year rule to import aircraft.
- Developed economies have no such restriction but in India, where the cost of money (bank rate of interest) is more than the west; having this rule inhibits growth of aviation.
- Removing requirement of flying 100 hours on type with an instructor, before being released as Captain. If we don't do it, we will face an acute shortage of pilots in command, like it happened last year.
- Dual captaincy must be encouraged so that well experienced pilots are free to fly more than one type of aircraft at a time.
- Common ratings for engineers. Reducing number of categories will help improve overall availability of engineers.
- Government needs to immediately align our policies with the rest of the world in as far as leasing laws are concerned. We need to be full signatories of the Cape Town Convention and address the worries of Lessors especially on repossession of aircraft.
- Helicopters are not well exploited because of our archaic regulatory environment. Night operations are very restrictive in nature and as a result, we have had a very poor growth of helicopter industry in the country.
- Handling and maintaining of foreign aircraft need mutual



THE MIGRATION TO PRIVATE AVIATION, PARTICULARLY DURING THE PANDEMIC, HAS RESULTED IN AN INCREASED DEMAND FOR PRIVATE CHARTERS

validation of licenses. Mutual trust needs to be built up by high standard of engagement with regulators of other countries.

- Tax/Royalty need to be at par with the neighbouring countries. Mehra also threw light on some of the government policies that needs attention like rationalising air turbine fuel tax which is very high at the moment and lowering of duty structures in import of business jets.

Governments hold the key to expansion of any critical sector and considerations must be given to the exploration of introducing tax incentives, which could encompass reduced corporate taxes or tax credits for both lessors and lessee airlines.

FRACTIONAL OWNERSHIP OF PRIVATE CHARTERS AND ITS IMPLICATIONS

Meanwhile the government is currently working on a policy for fractional ownership of private charters with an aim to boost the business aviation market in India. Fractional ownership as a concept has worked very well in the west with large number of business aviation aircraft. India is standing at a stage where there is a lot of demand, and this concept will help meet the rising demand is the common tone of the industry.

Hailing this move, Mehra says, "Club One Air was the pioneer of fractional ownership way back in 2006, but at that time Indian market was not ready for this type of hour-sharing concept." However, Mehra feels that since then India has come a long way and fractional ownership could actually be one of the successful moving ahead.

Echoing Mehra's thoughts, Mirchandani also feels that with aviation demand peaking, there is plenty of scope for finding solutions with fractional ownership. "This can keep the cost of maintenance low and will be a more sustainable solution in the long term."

However, Colonel Julka points out that even though the ministry is keen to implement it, they are unable to negotiate the issue of 'separate owners and operator.' Separate owner and operator is an essential concept for fractional ownership. It is followed worldwide and needs to be followed even in India. The industry has been in talks with the Government from past three years to implement fractional ownership.

Expressing his opinion, Julka says:

- Present regulations are being perceived negatively by the government
- Fractional ownership would provide opportunity for people to own share of an aircraft enabling many individuals to invest in aviation by booking depreciation in their books
- Incentive to buy an aircraft.

CHALLENGES FACING BUSINESS AVIATION

Another major pain point for business aviation in India is exorbitantly high airport charge. Industry experts have time and again voiced common opinion on the issue. Every cost can be a cause of distress and that is true across all business. The airport charges need to be monitored and rationalised by AERA (Airport Economic Regulatory Authority).

Some of the other challenges faced by business aviation in India apart from supply-demand of new aircraft is engineering challenges, talent shortage, and inadequate infrastructure. Mirchandani has given a few pointers to tackle these challenges:

- fostering partnerships with aircraft manufacturers to address supply-demand gaps,
- investing in advanced engineering capabilities and training programmes,
- collaborating with educational institutions to develop a skilled workforce,
- advocating for infrastructure improvements and regulatory reforms to support the growth of the sector.

"By addressing these challenges proactively, the business aviation industry in India can overcome barriers to growth and unlock its full potential," Mirchandani adds.

Meanwhile, it not just political parties that are interested in private charters, there is a steady stream of business class individuals, families planning exotic vacations on charters and sports personnel wanting to take private charters, thus expanding the private charter market beyond capacity.

Government is playing its part by building more helipads and aerodromes in future to boost the business aviation sector. "The government is doing the best they can," says Mehra. "Infrastructure development was long overdue. Meanwhile the government has also encouraged airline and leasing companies to set up base in GIFT City which is benefiting the industry and saving foreign exchange," Mehra concludes.

While infrastructure development, such as building more helipads and aerodromes, is undoubtedly crucial for boosting the business aviation sector, it alone may not be sufficient to address all the challenges faced by existing and new players, feels Mirchandani. He further goes on to suggest that the government can further support the business aviation

industry by implementing supportive policies and regulatory frameworks that streamline operations, reduce bureaucratic hurdles, and foster a conducive business environment. "Additionally, providing financial incentives or tax breaks for investments in the sector, promoting skill development initiatives to address talent shortages, and facilitating access to financing and insurance options can significantly benefit both existing and new players in business aviation," Mirchandani concludes.

Despite its immense potential, business aviation in India faces hurdles that hinder its rapid expansion. However, with concerted efforts from both the government and industry stakeholders to address these challenges, there is considerable scope for the business aviation sector to thrive and contribute significantly to the country's aviation landscape.

India has 140 billionaires and around 175 business jets while US has 750 billionaires and over 10,000 business jets. Going ahead from here, business aviation in India will only see an upward trajectory not only in this decade but in this century. Quoting an unknown personality Julka says "It is not India's decade but it's India's century." **BAI**



PROACTIVE ADDRESSING OF CHALLENGES SUCH AS HIGH AIRPORT CHARGES, TALENT SHORTAGES, AND INFRASTRUCTURE DEFICIENCIES CAN UNLOCK THE FULL POTENTIAL OF THE BUSINESS AVIATION INDUSTRY IN INDIA

A Showcase of the Latest Technological Advancements in BizAv

BY AYUSHEE CHAUDHARY

With the focus on sustainability and innovation, and a display of cutting-edge technological advancements, insightful discussions, and strategic collaborations, EBACE2024 provided a comprehensive glimpse into the future of aviation

E BACE2024, ONE OF THE largest gatherings for the business aviation industry in Europe concluded after a grand celebration of the industry's advancements. Co-hosted by the European Business Aviation Association (EBAA) and the National Business Aviation Association (NBAA), the European Business Aviation Conven-

tion & Exhibition (EBACE) 2024 yet again highlighted groundbreaking trends and technologies in air travel. Held from May 28-30 in Geneva, the event featured the debut of new aircraft and industry innovations, alongside a Sustainability Summit. Attendees experienced the latest in bizjets, turboprops, rotorcraft, and advanced air mobility (AAM) vehicles, including

EBACE2024 EMPHASISED THE INDUSTRY'S COMMITMENT TO SUSTAINABILITY AND INNOVATION WITH KEY HIGHLIGHTS SUCH AS ACHIEVING NET-ZERO CARBON EMISSIONS BY 2050



PHOTOGRAPH: EBACE



THE NEW PILATUS PC-24 WAS ON STATIC DISPLAY TO SHOWCASE THE NEW LUXURIOUS DIVAN TO EXPERIENCE UNPARALLELED COMFORT AND INNOVATION

electric- and hydrogen-powered, zero-emission aircraft, alongside some promising announcements, deals, and launches.

EBACE2024 emphasised the industry's commitment to sustainability and innovation with key highlights such as:

- Top executives discussing the goal of achieving net-zero carbon emissions by 2050.
- Government leaders underscoring aviation's crucial partnership role in policymaking.
- The launch of the CLIMBING. FAST. initiative to promote sustainability leadership.
- A three-day Sustainability Summit focused on accelerating the path to net-zero emissions.
- Introduction of EBAA's S.T.A.R.S. programme, aligning with the UN's Sustainable Development Goals.
- Collaboration between leading aviation companies and technical students to mentor future talent.

INDUSTRY PROSPECTS

EBACE2024 also offered an insight into the industry through the various discussions that took place on and off the stage. Key data analysts expressed confidence in industry growth for the second half of 2024, despite challenges with supply chains and workforce shortages

as many presented an outlook of the industry. Global business aviation flights rose 1.2 per cent year-over-year from January to April 2024, though overall traffic dipped 1.5 per cent, according to WingX. Business aviation fleets showed strong growth, with single-tail operators experiencing an 18.1 per cent year-over-year increase. They also highlighted a unique global trend that witnessed European fleet growth outpacing the region's GDP growth.

Post-pandemic supply chain issues have impacted production and services in 2024, but pressures are easing. A JetNet iQ survey of 439 owners and operators identified supply chain recovery and talent retention as significant challenges. Global Jet Capital (GJC) forecasted the business jet market will reach \$193 billion in transactions between 2024 and 2028, with new deliveries projected to grow by 9.4 per cent this year and an average annual rate of 3.2 per cent over the next five years.

The event also noted the shortage of pilots in the industry, along with a lack of maintenance technicians, and other roles, with a 2023 CAE study projecting the need for 1,06,000 new business aviation professionals by 2032. The convention allowed a space for young professionals to interact and engage with experts from the industry and



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SHORTAGES, WITH
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FLEETS SHOWING
STRONG GROWTH**



DASSAULT FALCON TOOK CENTRE-STAGE SHOWCASING ITS CUTTING-EDGE FALCON BUSINESS JETS

hear them during significant discussions that were centered on attracting young talent through outreach, internships, mentoring, and access to industry events. Despite challenges, the outlook for business aviation remains optimistic, with expected growth in charter flight demand and fleet expansion.

DISPLAYING AVIATION EXCELLENCE

The static display is always a highlight of any airshow, offering attendees a chance to see some of the finest aircraft in the industry up close, and EBACE2024 was no exception. Although key players like Bombardier and Gulfstream chose not to exhibit this year, the event still featured other major players, numerous exciting debuts, including VoltAero's first eVTOL vehicle and various hydrogen and electric innovations. Bombardier chose to skip EBACE2024 to concentrate on regional marketing strategies but emphasised its ongoing support for EBAA and NBAA initiatives. Similarly, Gulfstream decided not to participate, aligning this choice with its business objectives, as it did for NBAA-BACE in October. Despite disruptions from eco-protestors at the 2023 EBACE, neither company mentioned this as a reason for their absence this year.

The 2024 European Business Aviation Convention & Exhibition

(EBACE2024) elevated its aircraft display to new heights, featuring the newly certified Gulfstream G700, striking business jets from Airbus, Boeing, and Dassault, and an impressive array of Textron airplanes.

- Pilatus Aircraft debuted the upgraded PC-24 with a 600-pound payload increase, extended range, and new side-facing divan convertible to a bed. Pilatus also showcased the PC-12NGX turboprop.
- Tecnam presented the P2012 STOL piston twin, approved for steep approaches and designed for short takeoff and landing operations. Tecnam's P2012 STOL is the only twin-piston aircraft with such capabilities that complies with the latest certification amendments.

complies with the latest certification amendments.

- Airbus Corporate Jets and Comlux displayed an ACJ TwoTwenty, emphasising its spacious cabin and intercontinental range, along with the ACH175 helicopter in a 12-passenger configuration.

- The first of five ACH160s for Air Corporate, which announced an order for 43 Airbus helicopters at the 2023 edition of the show, was also on display at EBACE2024.

- Dassault Aviation flew the Falcon 8X from Paris to Geneva, showcasing advanced technology, and presented a full-scale mockup of the 10X set for 2027.
- Leonardo unveiled a full-scale



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EMBRAER PRAETOR 600, THE WORLD'S MOST TECHNOLOGICALLY ADVANCED SUPER-MIDSIZE BUSINESS JETBY QATAR EXECUTIVE

cabin mockup of the AW09 single-engine helicopter, marking its official entry into the Agusta family.

- Lufthansa Technik (LHT) showcased updates to its Networked Integrated Cabin Equipment (Nice) inflight entertainment (IFE) and cabin management platform, new aeromedical cabin systems, an innovative antenna radome, and a chemical-free fuel tank sanitization method.
- Embraer highlighted the Praetor 600 and Phenom 300E, underscoring their suitability for European operators.
- VoltAero displayed a mockup of its hybrid-electric Cassio aircraft and demonstrated its technology with biofuel-powered flights. The company also flew its technology demonstrator aircraft to the event in Geneva from its headquarters in western France, running the propulsion system on biofuels made from wine.
- Lilium unveiled a full-scale model of the eVTOL aircraft targeting a 2026 market entry, aiming to connect communities across the French Riviera.
- Qatar Executive (QE) showcased a brand-new Gulfstream G700, soon to enter commercial service with a fleet of 10 by 2025.
- Alliance Aviation Group presented a newly painted Bombardier Global 6000.
- Piper Aircraft featured the M700 Fury turboprop.
- Textron Aviation displayed the Cessna Citation Longitude, Citation Latitude, Citation CJ4 Gen2, M2 Gen2, and the Beechcraft King Air 360.

EBACE2024 highlighted groundbreaking advancements and a collective vision for a sustainable future, with each display contributing to the vibrant mosaic of business aviation's next chapter.

ALLIANCES AND ANNOUNCEMENTS

When industry leaders converge in a hub brimming with technological advancements, key discussions, and captivating displays, the event is bound to be more than just talks and sights. Collaborations, launches, deals, celebrations, and announcements are inevitable. Here are some of the major highlights from EBACE2024:

- Viasat underscored its dedication to improving connectivity solutions and fostering partnerships within the business aviation sector. The company celebrated the approval of Satcom Direct's Plane Simple Ka-band tail mount terminal for the Gulfstream G650, a significant milestone in the rollout of SD's antenna series.
- Axis Aviation introduced its asset management platform designed to simplify tasks and provide accessible, transparent information.
- Celebrating its 40th anniversary and making its EBACE debut last year, UK-based trip support provider General Aviation Services (G.A.S.) that offers permits, ground-handling solutions, and cost-effective fuel options across Africa and globally, expanded its operations to Botswana, Namibia, and Mozambique.
- Aria Hotels, a subsidiary of Libra Group, announced plans to construct and operate four vertiports across Greece worth €50 million of investment.
- Leonardo expanded its order book for the AW09 light helicopter through a distributorship agreement with Universal Vulkan Aviation in India, adding five orders, and recent partnerships with Léman Aviation and Sloane, totaling 19 orders. Overall, AW09 orders have surpassed 100.



QATAR EXECUTIVE BROUGHT THEIR RECENTLY INDUCTED, THE NEWLY CERTIFIED GULFSTREAM G700, AT THE SHOW

- ForeFlight partnered with Breakthrough Energy to develop a tool to help flight planners and pilots reduce contrails. This early-stage feature will be added to ForeFlight's suite to provide information on contrail conditions, allowing operators to adjust flight paths accordingly.
- Geneva-based Titan Aviation Fuels International expanded its European sustainable aviation fuel (SAF) distribution network with five new locations in Spain. Customers at Madrid, Barcelona, Palma, Málaga, and Seville airports can now access SAF produced by Cepsa.
- Austria-based online aircraft charter facilitator VOO signed an agreement with European charter operator GlobeAir to offer exclusive instant booking capabilities for the GlobeAir fleet.
- Airbus Corporate Helicopters handed over the first ACH160 featuring the Lounge configuration of its Line cabin during a ceremony at EBACE 2024.
- Lilium announced a partnership with Aéroports de la Côte d'Azur and Italian infrastructure group UrbanV to develop vertiports at multiple locations, starting with Nice Côte d'Azur Airport, Cannes Mandelieu Airport, and Golfe de Saint-Tropez Airport. The same week, UK-based aircraft management and charter group Volare Aviation firmed up a purchase agreement to acquire and operate up to 16 Lilium Jets, with a binding agreement for the first four and reservations for an additional 12 units.
- German air service provider Flyvbird partnered with travel planning company Moove to integrate Moove's technology for faster, more sustainable air travel solutions.
- Universal Weather and Aviation signed an agreement with Altanfeethi to explore opportunities for transforming general aviation infrastructure in Saudi Arabia.
- Textron Aviation announced enhancements to Garmin's G5000 avionics for the Cessna Citation Latitude and Longitude, including the GDL 60 datalink for remote database downloading, a synthetic vision guidance system, 3D SafeTaxi, taxi routing, and a runway occupancy awareness function.
- Aviation solutions provider UAS International Trip Support and aviation sustainability leader 4AIR announced a strategic partnership to offer sustainable aviation solutions to UAS's global clientele.

EBACE2024 has once again solidified its position as a premier event in the business aviation calendar, highlighting the industry's unwavering commitment to sustainability and innovation. This year's convention was a hub of cutting-edge technological advancements, insightful discussions, and strategic collaborations. From showcasing revolutionary low-emission aircraft to unveiling sophisticated connectivity solutions, EBACE2024 provided a comprehensive glimpse into the future of aviation. The event also served as a platform for fostering the next generation of aviation professionals, ensuring that the industry continues to evolve in a responsible and forward-thinking manner. The resounding theme of sustainability and innovation rung clear. The event not only celebrated significant strides in green technology and advanced air mobility but also emphasised the importance of collaboration and strategic partnerships in driving the industry forward. With major deals and groundbreaking announcements, EBACE2024 has set a high tone for the future of the business aviation industry. **BAI**



AN OVERVIEW OF THE LILIUM JET EXHIBIT AT EBACE2024. LILIUM EVTOL AIRCRAFT IS TARGETING A 2026 MARKET ENTRY.

Shaping Tomorrow's Skies

WITH A STRONG FOCUS on reducing carbon emissions and advancing fuel-saving technologies, this year's convention brought together key developers and industry leaders dedicated to shaping a greener, more efficient aviation landscape. The event highlighted groundbreaking advancements in hydrogen-based propulsion systems and automated flight technologies, presenting a vivid picture of the future of aviation.

INNOVATION IN ADVANCED AIR MOBILITY

This year's EBACE marked a milestone by prominently featuring leading AAM companies both in the Palexpo exhibit hall and outdoors at Geneva Airport. The event showcased cutting-edge, low-emission, and zero-emission AAM aircraft powered by hydrogen, electric, and hybrid-electric systems.

Experts at the conference discussed the future of automated commercial flights within the AAM sector, emphasising the need to safely integrate autonomous passenger aircraft into global airspace. Panelists highlighted the necessity of a collaborative approach involving engineers, regulators, and developers to uphold safety standards. Initial implementations may include highly automated systems assisting pilots, paving the way for fully autonomous flights.

EBACE2024 introduced an expanded Innovation Zone,

featuring prominent eVTOL aircraft developers and other AAM ecosystem stakeholders as key speakers. At the Innovation Pavilion, pioneering AAM companies showcased their groundbreaking models, including:

- **Beyond Aero:** Presenting the ONE, the first electric business aircraft designed for hydrogen propulsion. After completing France's first manned hydrogen-electric flight, Beyond Aero is now developing an electric business jet powered by a hydrogen fuel cell.
- **ELECTRON:** A Rotterdam-based company producing 100 per cent battery-powered aircraft for regional use, currently developing an all-electric cargo plane.
- **Hydroplane Limited:** This California company is developing a modular hydrogen fuel cell for general aviation, urban air mobility, and vertical lift aircraft.
- **Lilium:** Unveiling the first full-scale model of its all-electric vertical take-off and landing (eVTOL) Lilium Jet, set for market release in 2026.
- **Vaeridion:** A Munich-based company creating highly efficient electric-powered "microliners" aimed to commence operations before 2030.
- **VoltAero:** Designing hybrid-electric aircraft for passenger, cargo, and medical evacuation use, with the first flight of its full-scale Cassio 330 hybrid electric aircraft expected by year-end. Cassio was on display for the visitors at the show.

Conference sessions delved into topics such as hybrid hydrogen-electric eVTOLs, eVTOL vehicles and drones in emergency and humanitarian missions, and the role of hydrogen propulsion in achieving net-zero carbon objectives.

In other announcements:

- Satcom Direct announced Avcon Jet as the launch customer for its Plane Simple fuselage-mounted Ku-band electronically-steered antenna (ESA), linking aircraft to the Eutelsat OneWeb satellite constellation.
- Climate Aero, based in the Netherlands, launched a platform to assist business aircraft operators in addressing environmental concerns. Offering free services to aircraft owners, Climate Aero's database of over 2,00,000 private aircraft enables transparent carbon emissions reporting, helping operators understand and improve their environmental impact.
- PHI Group signed a deal with Leonardo for up to 12 AW189 helicopters, including extensive support for maintenance, repair, overhaul, service center agreements, and training solutions for both the AW189 and the smaller AW139.

THE FUTURE OF AUTOMATION AND PROTECTIVE MEASURES

Integrating human pilots with automation could enhance operational effectiveness. The progression towards fully automated flights will depend on the reliability and acceptance of these systems. Experts at EBACE2024 concurred that completely replacing pilots with automated systems will take time. They emphasised the necessity for developers to collaborate and share safety insights to prevent mishaps. Automated aircraft could communicate with each other, enhancing safety by sharing real-time airspace information. Achieving autonomous passenger flights will require intricate collaboration across the entire aviation ecosystem, including air traffic control and aircraft systems, to ensure safe and efficient integration into global airspace.

The International Aircraft Dealers Association (IADA) has partnered with Jetquity to offer a programme designed to protect business aircraft buyers. The new Residual Value Guarantee Programme safeguards buyers against market volatility by agreeing to purchase aircraft at preset prices determined by algorithms and AI.

Celebrating its 10th anniversary, the International Business Aviation Council (IBAC) honored SRC Aviation of New Delhi, India, the first registered ground handler under the International Standard for Business Aircraft Handling (IS-BAH) programme. As part of this milestone, IBAC launched the "Elevating Ground Handling Safety" campaign, further enhancing safety standards in ground handling operations.

PIONEERING THE SUSTAINABLE PATH TO NET-ZERO EMISSIONS

EBACE2024 also strongly showcased the industry's commitment to net-zero emissions and its progress toward its carbon goals with a three-day Sustainability Summit; a focus on

the latest alternative propulsion technologies, including Swiss explorer Bertrand Piccard's project to fly around the world in an aircraft powered by green hydrogen; an AAM aircraft on the outdoor display for the first time; an innovation pavilion with next-generation planes; and the unveiling of new set of sustainability standards for the industry.

SAF was made available at the Geneva Airport for those traveling to the annual EBACE2024. Jet Aviation delivered a 35 per cent blend of SAF to GVA for the event, marking the company's third year providing SAF for EBACE.

The business jet CEOs at the conference discussed strategies for achieving net-zero emissions by 2050. Key approaches included SAF, low-emission propulsion systems, improved aircraft design, and industry-wide collaboration. They emphasised the need for increased SAF production, regulatory incentives, and significant investment in green technologies. Future solutions that were underlined included hybrid electric and hydrogen propulsion, along with sustainable manufacturing practices.

Globally, SAF production is less than one per cent of jet fuel consumption, primarily through HEFA, which uses used cooking oils, fats, and greases. Concerns exist about HEFA feedstock availability. Other production pathways, like alcohol-to-jet from ethanol and power-to-liquid using electricity, are emerging. Blended SAF is available at around 30 European airports, with upcoming regulations favoring larger airports.

They stressed the importance of SAF, predicting the development of new low-emission platforms with hybrid electric propulsion systems, a future where hydrogen plays a crucial role in achieving net-zero emissions, importance of green manufacturing practices and highlighted ongoing investments in innovation driving efficiency gains in aircraft design and propulsion.

Boeing Business Jets announced its leadership role in NASA's sustainable

flight demonstrator project, aiming for significant fuel efficiency gains to support the industry's net-zero goals.

With European Union mandates on SAF set to start next year, experts at EBACE2024 noted a growing demand and increasing availability for this eco-friendly Jet A alternative globally.

SAF, made from sustainable feedstocks like cooking oils, biomass, and agricultural residues, is key to achieving net-zero carbon emissions by 2050, potentially reducing lifecycle emissions by up to 80 per cent. At the convention, a panel of SAF experts discussed the ongoing challenges as business aviation adopts this new fuel.

The EU's ReFuelEU Aviation Initiative mandates a minimum two per cent SAF share at EU airports by 2025, increasing to six per cent in 2030, 20 per cent in 2035, and 70 per cent by 2050.

Other countries like Portugal, France, and Germany are also implementing SAF mandates. The UK has a similar proposal, starting next year, requiring a 10 per cent blend by 2030 and a SAF usage mandate beginning in 2025. SAF mandates are also in place in Norway, Sweden, and France.



THIS YEAR'S EBACE PROMINENTLY FEATURED LEADING ADVANCED AIR MOBILITY (AAM) COMPANIES SHOWCASING LOW-EMISSION AND ZERO-EMISSION AIRCRAFT POWERED BY HYDROGEN, ELECTRIC, AND HYBRID- ELECTRIC SYSTEMS

SHOW REPORT EBACE2024 - AAM

Some airports offer book-and-claim transactions for SAF, allowing operators to purchase SAF credits even if the fuel isn't available at their location. However, EU regulations currently hinder the use of these certificates to meet upcoming mandates.

An Exhibitor Sustainability Pledge was one another way organisers and participants for the EBACE2024 took meaningful steps toward producing a more sustainable event. Exhibitors signing the pledge agree to take at least five actions to show their sup-

port. These include carbon offsets for staff traveling to and from Geneva, reusing elements from past exhibits, creating graphics and signage with 75 per cent recycled materials and much more.

Climate Change (BACCC) and the United Nations Sustainable Development Goals, S.T.A.R.S. aims to propel business aviation companies towards a more responsible and sustainable future.

Introduced at the 2019 European Business Aviation Convention & Exhibition (EBACE), S.T.A.R.S. was developed by a group of young professionals from various European aviation companies who first proposed the idea at the One Young World Summit. This year's official launch builds on the groundwork laid during EBACE2022, where participants outlined the pilot programme's schedule.

Tier 1 of S.T.A.R.S. focuses on self-assessment and the development of policies aimed at continuous progress toward environmental and social sustainability. These policies cover areas such as greenhouse gas emissions reporting, waste and water management, non-discrimination, inclusiveness, a new code of conduct, and data privacy and security. Tiers 2 and 3 involve implementation stages designed to comply with international standards.

S.T.A.R.S. is part of a broader series of innovative steps taken by the business aviation sector to reach net-zero carbon emissions by 2050, a goal established by the BACCC and reinforced by the CLIMBING.FAST. campaign. It complements the National Business Aviation Association's (NBAA) award-winning Sustainable Flight Department Accreditation Program.

EBAA'S COMMITMENT TO THE CLIMBING.FAST. CAMPAIGN

At EBACE2024, EBAA formally joined the CLIMBING.FAST. campaign, a global initiative dedicated to achieving net-zero carbon emissions in aviation by 2050. The campaign aims to raise awareness among policymakers and opinion leaders about the societal benefits of business aviation, including job creation, economic development, community connectivity, and humanitarian aid. By joining this initiative, EBAA ensures alignment with European regulatory and cultural norms. CLIMBING.FAST. was launched in 2023 at the NBAA Business Aviation Convention & Exhibition.

These initiatives highlight the proactive steps the business aviation sector is taking to achieve a sustainable future, with the ultimate goal of net-zero carbon emissions

by 2050. EBACE2024 painted a vibrant and promising future for aviation, where sustainability and innovation are at the forefront. The initiatives showcased at the convention underscored the industry's unwavering commitment to achieving net-zero emissions and integrating advanced air mobility technologies. By fostering collaboration among developers, regulators, and engineers, EBACE2024 set the stage for a safer and more efficient global airspace. **BAI**

— By Agushee Chaudhary



(TOP) A MOCKUP OF VOLTAERO'S CASSIO 330 HYBRID-ELECTRIC AIRCRAFT;
(ABOVE) BEYOND AERO'S PROTOTYPE OF AN ELECTRIC AIRCRAFT POWERED BY HYDROGEN.

S.T.A.R.S.: SETTING A NEW STANDARD IN AVIATION SUSTAINABILITY

The Standards & Training for Aviation Responsibility and Sustainability (S.T.A.R.S.) programme provides a comprehensive framework for organisations to seamlessly integrate environmental and social strategies. By aligning with the Business Aviation Commitment on

EXCLUSIVE

ARUN KASHYAP,
PROMOTER AND CEO, SIRIUS INDIA AIRLINES



“India’s Charter Segment is Under-Served” — Arun Kashyap

An Unserved private charter segment propels MRO veteran **Arun Kashyap** to start off on his own new venture Sirius India Airlines by partnering with a UAE-based conglomerate Airavat Aviation

ARUN KASHYAP, PROMOTER AND CEO of Sirius India Airlines, is an aviation veteran with a Master’s in Air Transport Management from City University, London, boasting over 25 years of global experience. He’s held key roles at Jet Airways, Oman Air, Flydubai, Air India, and SpiceJet where he spearheaded major initiatives.

The Q&A below is an attempt to give a brief glimpse into the life of Arun Kashyap, the reasons behind the major switch from MRO to charters and his reasons for diving into the interesting world of business aviation. Speaking to Swaati Ketkar for SP Guide Publications in an exclusive interview, Arun Kashyap tells us about his plans for the new venture, his thoughts on fractional ownership and the post-pandemic luxury and business aviation segment in India. Read on...

Swaati Ketkar (Swaati): First of all, congratulations on the launch of a new charter company, Sirius India Airlines. What attracted you to the charter segment of aviation?

Arun Kashyap (Arun): Thanks for your wishes! The charter segment of aviation offers unique opportunities for personalised, flexible travel experiences. And most importantly the sector is under-served; and which was a key factor in our decision to launch Sirius India Airlines in this segment.

Swaati: The switch from MRO to Charter came as a surprise to many. Can you tell our readers your thoughts behind this switch?

Arun: While I may not have a lot of specifics to share right now, it’s crucial to understand that we have not stopped our MRO business. In reality, our MRO services complement and bolster our Charter business.

Swaati: Which are the routes you are planning to explore initially i.e – at the launch phase of operations?

Arun: As a charter business, we don’t have fixed route planning. We’re prepared to cater to client demands anywhere in India primarily. With our partners, Airawat, (a Transworld Group company), having the capacity for international charter travels, we’re certainly looking to explore that market as well.

Swaati: You initially plan to start operations with a Hawker 4000 aircraft and with plans to add another three aircraft this financial year. What is your aircraft of choice for fleet expansion and why?

Arun: Initially, our operations will be solely with the Hawker 4000 aircraft. Our plan is to incorporate two additional aircraft between September and February this year. Introducing another class or make of aircraft could potentially raise operational and maintenance costs. We are also evaluating other aircraft types in all segments to cater our future growth.



SIRIUS INDIA AIRLINES HAS PARTNERED WITH AIRAVAT AVIATION, A LUXURY AIR TRAVEL BRAND OWNED BY THE DUBAI-BASED TRANSWORLD GROUP TO INTRODUCE PREMIUM PRIVATE CHARTER SERVICES

Swaati: Your thoughts on fractional ownership in private charter. How will it give a much-needed boost to the segment?

Arun: Fractional ownership in private charter is a promising avenue that can revolutionise the segment. It allows individuals and businesses to enjoy the benefits of private air travel without the burdens of full ownership. This model can significantly boost accessibility and affordability in the private charter sector and will enhance the demand of business jet in country.

Swaati: Will you consider operating under RCS-UDAN routes? How relevant do you find the RCS-UDAN to BA and GA industry in India?

Arun: We are not considering operating under RCS-UDAN routes in this segment of business. The RCS-UDAN scheme is not so relevant to Business Aviation in India. For fostering growth and accessibility, RCS is more relevant in commercial aviation with different type of aircraft fleet. We don't fall into the same with Business Jet.

Swaati: Luxury and business charter segment is on a roll in India, especially post-pandemic. Your views?

Arun: The luxury and business charter segment in India has seen significant growth, especially post-pandemic. This trend reflects the increasing demand for personalised, safe, and efficient travel options. We are excited to con-

tribute to this thriving market and provide unparalleled service to our clients. However, the private charter segment in India is underserved and holds immense potential for growth. While competition is increasing, there is still ample room for new players to enter the market and offer innovative services. Positives include a growing affluent class, increasing business travel needs, and a desire for exclusive travel experiences. However, challenges such as infrastructure development and regulatory complexities need to be addressed, with collaboration between industry and authorities.

Swaati: Any words of advice to potential investors planning to venture into private charter market in India?

Arun: As a new business entity in this sector, speaking from that limited experience wouldn't be appropriate. However, drawing from our extensive years in this industry, we have some advice for new entrants. To potential investors eyeing the private charter market in India, I would suggest thorough market research and a strong emphasis on customer-centric services. Understanding the diverse needs of travellers and delivering customised, high-quality experiences will be pivotal for success. Furthermore, staying updated on regulatory shifts, Operational challenges and investing in infrastructure will be essential for sustainable growth in this dynamic sector. **BAI**



**"FRACTIONAL OWNERSHIP
IN PRIVATE CHARTER CAN
SIGNIFICANTLY BOOST
ACCESSIBILITY AND
AFFORDABILITY IN THE
PRIVATE CHARTER SECTOR
AND WILL ENHANCE THE
DEMAND OF BUSINESS JET
IN COUNTRY"**

Sirius Aviation and BMW Group Unveil Revolutionary Hydrogen-Powered Business Jets



Sirius Aviation AG, an innovative leader in aviation, unveiled two revolutionary hydrogen-powered luxury business jets, the Sirius CEO-JET and the Sirius Adventure Jet. Developed in collaboration with BMW Group Designworks, these groundbreaking aircrafts aim to transform private air travel with eco-friendly alternatives, substantially reducing CO2 emissions. The global debut occurred on June 20, 2024.

The Sirius CEO-JET, the world's first hydrogen-powered private jet marks a new era in sustainable business aviation. This elegant, state-of-the-art aircraft seamlessly integrates advanced technology with unparalleled customisation, and eco-friendly modern luxury. Combining sustainable business aviation with modern luxury, this aircraft utilises a hydrogen-electric powertrain for zero carbon emissions. It cruises at speeds up to 323 knots, has a range of up to 1,150 miles, and seats three passengers. The upscale interior offers extensive

customisation options such as unique colours, upholstery, amenities like champagne fridges, pet accommodations, and bespoke bathrooms, catering to discerning travellers.

The Sirius Adventure Jet, is a revolutionary hydrogen-powered aircraft designed for those passionate about exploration. The game-changing jet facilitates unprecedented point-to-point green-travel, allowing thrill-seeking adventurers to reach remote jungles, majestic mountains, and untouched destinations with ease and efficiency. Designed for leisure and adventurous pursuits, this jet boasts a pioneering hydrogen-electric powertrain for sustainable travel. It has a range of up to 1,150 miles, speeds reaching 323 knots, and accommodates five passengers. With an exploration-ready design, it provides seamless access to uncharted territories and offers customisable interiors tailored for both leisure and adventures. **BAI**

FLYINGGROUP Adds Ninth PC-24 to Management Programme

FLYINGGROUP has signed an agreement to add a ninth PC-24 to its fleet management programme. The Belgian charter company has operated the Super Versatile Jet by Pilatus since 2020.

The acquisition of the PC-24 will allow FLYINGGROUP to add even more variety and performance to its fleet for the benefit of passengers and crews alike. At the handover in Stans, Johan van Lokeren, CEO of FLYINGGROUP, expressed his satisfaction with the new addition to his fleet of PC-24s: "Our customers love the PC-24! The Super Versatile Jet is the most modern jet in its class and the spacious cabin offers unparalleled comfort. Our first 'Edelweiss PC-24' has been in operation for several years, and we're proud to take delivery of a second, latest generation 'Edelweiss PC-24' with a higher payload and even greater range." **BAI**

PHOTOGRAPHS: Sirius Aviation

Lilium Completes Successful Tests of its Electric Jet Propulsion System

Lilium N.V., a leading electric aircraft manufacturer and pioneer in Regional Air Mobility (RAM), has successfully completed the first series of tests of its electric jet propulsion unit. For the first time, the electric engines were taken up to maximum thrust on the propulsion unit test bench, representing a landmark achievement on the journey to zero operating emissions flight and an important step towards verifying safety of flight of the Lilium Jet. The tests performed have demonstrated the expected level of performance and reliability, bolstering Lilium's confidence in the maturity of its electric jet propulsion system.

Testing of the propulsion unit, comprising two engines within a propulsion mounting system, was carried out at Lilium's dedicated propulsion unit test bed, located at Lilium's headquarters near Munich. The test bed has been designed for aerodynamic and electrical performance evaluation of Lilium's jet technology. **BAI**

Eve Air Mobility Unveils video of First eVTOL

Eve Air Mobility unveiled a teaser video of its first full-scale eVTOL non-conforming prototype as it continues production of the aircraft at its facility in Brazil. Eve released the video on its social media channels and will continue to share more updates on its progress in the coming months.



Eve's eVTOL aircraft utilises a lift+cruise configuration with eight dedicated propellers for vertical flight and fixed wings to fly on cruise, with no change in the position of these components during flight. The latest concept includes an electric pusher powered by dual electric motors that provide propulsion redundancy with the goal of ensuring the highest levels of performance and safety. While offering numerous advantages including lower cost of operation, fewer parts, optimised structures, and systems, it has been developed to offer efficient thrust with low sound. The company has begun assembly of its first full-scale eVTOL prototype which will be followed by a test campaign. Eve has letters of intent for nearly 3,000 eVTOLs and the aircraft is expected to enter into service in 2026. **BAI**

Cessna Citation Ascend Programme Advances

Textron Aviation announced the continued advancement of the Cessna Citation Ascend programme following the successful completion by the prototype aircraft of numerous certification tests and more than 350 flight test hours. The Citation Ascend business jet was unveiled during 2023 and is expected to enter into service in 2025.

The newest Citation is designed to bring a new cockpit, improved performance and a more luxurious cabin to the midsize business jet market. The aircraft's state-of-the-art avionics including autothrottle, high payload capacity and impressive range offer customers reduced pilot workload and the ability to do more and go farther.



The Citation Ascend features Pratt & Whitney Canada PW545D engines that use new materials and technology – including a more efficient high-pressure compressor and an enhanced single stage high-pressure turbine module. The PW545D engines are also equipped with a Full Authority Digital Engine Control (FADEC), enabling the new autothrottle technology and ensuring they operate at their maximum efficiency and with reduced pilot workload. **BAI**

Bombardier to Disclose Environmental Impact of its Entire Aircraft Portfolio

Bombardier became the only business jet manufacturer to ever disclose the scientifically-analysed environmental impact of its entire product portfolio. The publication of an Environmental Product Declaration (EPD) for its Challenger 650 business jet is the crowning milestone to Bombardier's commitment of developing and publishing EPDs for all its in-production aircraft by 2025.



All of Bombardier's business jets EPDs are publicly available on the company's website and display, amongst other information, the aircraft CO₂ emissions generated at each of the steps of the value chain: from raw material extraction until aircraft end-of-life.

EPDs have become an integral part of Bombardier's extensive environmental strategy, as they allow the company and its partners to proactively mitigate the environmental footprint of their products. **BAI**

Boeing to Acquire Spirit AeroSystems

Boeing announced it has entered into a definitive agreement to acquire Spirit AeroSystems. The merger is an all-stock transaction at an equity value of approximately \$4.7 billion, or \$37.25 per share. The total transaction value is approximately \$8.3 billion, including Spirit's last reported net debt.

"We believe this deal is in the best interest of the flying public, our airline customers, the employees of Spirit and Boeing, our shareholders and the country more broadly," said Boeing President and CEO Dave Calhoun. "By reintegrating Spirit, we can fully align our commercial production systems, including our Safety and Quality Management Systems, and our workforce to the same priorities, incentives and outcomes – centred on safety and quality." As part of the transaction, Boeing will work with Spirit to ensure the continuity of operations supporting Spirit's customers and programmes.

Additionally, Spirit is proposing to sell certain of its operations, including those in Belfast, Northern Ireland (non-Airbus operations), Prestwick, Scotland, and Subang, Malaysia. The transaction is expected to close mid-2025 and is subject to the sale of the Spirit operations related to certain Airbus commercial work packages and the satisfaction of customary closing conditions, including regulatory and Spirit shareholder approvals. **BAI**

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