AVICITI UPDATE Volume 9 Issue 12 september 2023

India's premier aviation monthly magazine

Price ₹150



Mr Ashok Gopinath President & Accountable Manager **GMR Aero Technic.**

PG 21



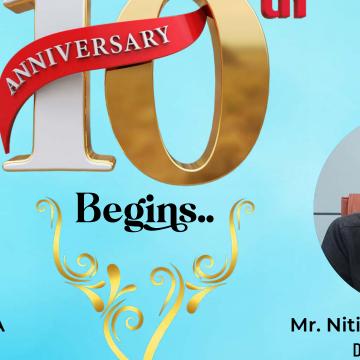
MD & CEO **Flybig Airlines**

PG 33



Mr. Arunakar MISHRA MD & CEO **Genser Aerospace**

PG 23





Mr. Nitin Sangwan IAS **Director - Civil Aviation, Government of Gujarat**

PG 14



Manufacturing Efficiency Redefined.

Maximized in-country value-add for global Aerospace customers.



India's first Precision Manufacturing SEZ



Visit our website: www.aequs.com

Etihad Cargo adds capacity for Europe, Asia

Page 42





LCA Tejas successfully testfires indigenous ASTRA Beyond Visual Range air-to-air missile off Goa coast

Page 18



Boom Supersonic Names Global Propulsion Leader as SVP of Symphony

Page 13



US Navy Awards Sikorsky Contract to Build 35 CH-53K Helicopters

Page 28



Textron Aviation Secures ANAC Certification for Cessna SkyCourier, Paving the Way for Sales in Brazil

Page 38

Investing in the future: Our educational efforts in India

Page 30





DHL Express to invest US\$192 million in aircraft maintenance facility at CVG Airport

Page 32



VOL: 09 | ISSUE: 12 | SEPT 2023

ᄓ

Editor-in-Chief 🔷 B. Kartikeya

EDITORIAL

Associate Editor
Rohith Reddy

Special Editor 🔷 Naheda Imtiyaz

Correspondent

B. Martin

CREATIVE HEAD \spadesuit Swati Sharma (Design Garage)

PHOTOGRAPHER • Krishanth

MARKETING

marketing@futureaviation.in

Manager, Marketing

Rohith Reddy

SUBSCRIPTION

Asst.Manager, Subscription

Sony

FINANCE & ADMINISTRATION

Sr.Manager 🔷 Karunandhi

Asst.Manager 🔷 Md. Wajid Ali

Editiorial & Advertising Offices

AVIATION UPDATE

Villa No :105, Nakshatra Society, Siddanthi, Shamshabad, Hyderabad, Telangana 501218
Subscription/ Circulation
Annual Subscription: 1800 INR – 12 Issues
Letter to editor Kartikeya@futureaviation.in
For Advertising details contact
Marketing@futureaviation.in

All information in Aviation Update nformation is derived from sources, which we consider reliable and a sincere effort is made to report accurate information. It is passed on to our readers without any responsibility on our part. The publisher regrets that he cannot accept liability for errors and omissions contained in this publication, however caused. Similarly, opinions/views expressed by third parties in abstract and/or in interviews are not necessarily shared by Aviation Update. However, we wish to advice our readers that one or more recognized authorities may hold different views than those reported. Material used in this publication is intended for information purpose only. Readers are advised to seek specific advice before acting on information contained in this publication which is provided for general use and may not be appropriate for the readers' particular circumstances.

Contents of this publication are copyright.

No part of Aviation Update or any part of the contents thereof may be reproduced, stored in retrieval system or transmitted in any form without the permission of the publication in writing. The same rule applies when there is a copyright or the article is taken from another publication. An exemption is hereby granted for the extracts used for the purpose of fair review, provided two copies of the same publication are sent to us for our records. Publications reproducing material either in part or in whole, without permission could face legal action. The publisher assumes no responsibility for returning any material solicited or unsolicited nor is he responsible for material lost or damaged. This publication is not meant to be an endorsement of any specific product or services offered. The publisher reserves the right to refuse, withdraw, amend or otherwise deal with all advertisements without explanation. All advertisements must comply with the Indian and International Advertisements Code. The publisher will not be liable for any damage or loss caused by delayed publication.

Printed at: Chennai offset printers : 19/1 & 21/2 Kitabath Khan Bhadur Street, Elliess Road, Mount Road, Chennai – 600 002 Aviation Update is published by - B.Kartikeya No:27/11,V.O.C.Street,T.Nagar, Chennai -600 017



B. KARTIKEYA

Hello Readers!

ur SEPTEMBER edition focuses on significant news from Indian aviation circles and examines the most recent advancements in the aviation sector. Arunakar MISHRA, MD&CEO of Genser Aerospace & Information Technologies Pvt. Ltd., Mr Nitin Sangwan, IAS Director - Civil Aviation from the Government of Gujarat, and Mr Ashok Gopinath, President & Accountable Manager of GMR Aero Technic, are featured in this issue's particular focus. You will learn about the programs offered at GMR School of Aviation, upcoming initiatives and projects launched by GUJSAIL in the civil aviation sector to ensure its long-term development, and the military transport aircraft 'RAJAS-Rakshan' along with the benefits of choosing UP Defence Industrial Corridor.

If you go down the Quick Updates section, you'll learn that a brand-new Air India has been launched to symbolise a brave, modern India in the international arena. In Q1 FY2024, SpiceJet's net profit increased by 126% to INR 205 billion from a loss of INR 789 billion in Q1 FY2023. You may learn a little bit more about Swissport's successful acquisition of the majority interest in Flughafen Düsseldorf Cargo GmbH in the Air Cargo section as well.

You should check out the Appointments section to learn about the most recent appointments in the aviation sector. Don't forget to browse the Business Aviation and Defense areas as well.

We constantly seek to bring up pertinent industry-related issues and call attention to crucial components of the aviation sector's expansion. Celebrations are not alone. We would like to celebrate with our Aviation Industry Peers throughout our 10th Anniversary Year. Why do we need to celebrate our 10th Anniversary only on one Month Alone? Please don't hesitate to contact us if you need help with the promotional activities.

With that, I bid you farewell for this month. We'll talk more when we next meet in our issue. God bless you till then, and keep safe.

Kasti key 37.0



















Let's start celebrating with us through out our 10th anniversary year









Connect With us:
Advertisement & Editorial: +91 9444499221
kartikeya@futureaviation.in

A New Air India is Unveiled, Representing Bold New India on the World Stage



Air India, a Tata Group-owned airline unveiled a modern new brand identity and new aircraft livery that capture the essence of a bold new India, marking a milestone in its Vihaan. Al transformation of the national institution into a national inspiration.

The new look reimagines the iconic Indian window shape, historically used by Air India, into a gold window frame that becomes central to the new brand design system - symbolising a 'Window of Possibilities'.

Air India's new logo symbol - 'The Vista' - is inspired by the peak of the gold window frame, signifying limitless possibilities, progressiveness, and the airline's bold, confident outlook for the future. Air India's brand-new aircraft livery and design features a palette of deep red, aubergine, and gold highlights, as well as a chakra-inspired pattern. It also boasts a striking new custom-made 'Air India Sans' font, marrying confidence with warmth to position Air India as premium, inclusive, and accessible.

Campbell Wilson, Air India CEO & MD, said: "Our transformative new brand reflects an ambition to make Air India a world class airline serving guests from around the globe, and that represents a new India proudly on the global stage. The new Air India is bold, confident, and vibrant, but also warm and deeply rooted to its rich history and traditions

that make Indian hospitality a global benchmark for standards in service."

Designed in partnership with the brand transformation company, FutureBrand, the iconic new brand identity combines Air India's glorious past with its drive to aim for excellence and innovate for the future, creating a standout brand design for a premium global airline with an Indian heart. Travellers will begin to see the new logo throughout their journey starting December 2023, when Air India's first Airbus A350 enters the fleet in the new livery.

"Colours, patterns, shapes and how they come together and what they represent matter, but our actions speak so much louder. We are in the midst of a total transformation to reimagine the role of India's flagship airline", Wilson said

IndiGo inaugurates its new dynamic office space: Where ideas will take flight!



IndiGo, India's preferred airline, takes immense pride in announcing the inauguration of its new office in The National Capital Region (NCR). The brand-new premises in Gurugram, symbolizes the airline's growth, efficiency, and development, while creating an inspiring and cohesive working environment for its employees In line with its strategy "Towards new heights and across new frontiers", IndiGo's new corporate headquarters

brings together teams working across different locations in NCR, under one roof. A technology driven workspace, designed along modern principles of space, light - the new premises will help enhance productivity, encourage greater collaboration and collective thinking between various IndiGo teams. As IndiGo expands its network across India and overseas, the new workspace will not only enable sharing common spaces, optimize various building and locations now into one but will also help IndiGo to facilitate its growth and yet while further enhancing its efficiency and agility.

Vistara announces direct flights between Delhi and Maldives



Vistara announced the addition of a new route to its growing international network. The airline will be further expanding its presence in Malé with direct, daily flights to and from Delhi starting 01 October 2023. Vistara will operate its A320neo aircraft featuring a three-class configuration on the route as it enhances connectivity between India and the Republic of Maldives. Bookings for the flights are being progressively opened on all channels, including Vistara's website, mobile app, and through travel agents.

Mr. Vinod Kannan, Chief Executive Officer, Vistara, said, "We are thrilled to introduce direct connectivity between Delhi and Malé – our second route

to the exquisite beach destination, in addition to Mumbai-Malé. This new route will enable us to provide our customers with enhanced access to one of the world's most popular holiday destinations while also imparting further momentum to the existing bilateral cooperation between India and the Republic of Maldives. With our state-of-the-art product and intuitively thoughtful services, we are certain that our customers will appreciate the choice of flying India's best airline on this new route."

Akasa Air completes one year of commercial operations



Akasa Air, India's most dependable and affordable airline completed one year of commercial operations in the Indian skies. The airline operated its first commercial flight on 07 August 2022 from Mumbai to Ahmedabad, presenting an empathetic service culture, more affordable choices and greater connectivity to Indians, ushering in a new phase of growth for Indian aviation.

With an initial fleet induction plan of adding one brand new aircraft every 15 days, Akasa Air has created the record of becoming one of the fastest growing airlines in the 120-year history of global aviation by virtue of achieving a fleet size of 20 new aircraft within 12 months of commercial operations. Further, the delivery of its 20th aircraft on 1 August 2023, makes Akasa Air the first airline in Asia to add the 737-8-200 variant of the Boeing 737 MAX aircraft to its rapidly expanding fleet. Akasa Air's order

book comprises 76 jets which include 23 737-8s and 53 737-8-200 airplanes. In addition, the airline remains fully committed to placing a three-digit aircraft order by the end of 2023.

Commenting on the milestone, Vinay Dube, Founder and CEO, Akasa Air, said, "We feel extremely fulfilled to have successfully executed our ambitious and unprecedented scale-up over the last 12 months. As we have grown and delivered to our plans. Akasa Air has become the preferred carrier for an increasing number of travellers across the country. The Akasa story is a testament of India's ongoing economic transformation and that of the country's rapidly progressing civil aviation landscape. We are even more proud of the manner in which we have grown. Our disciplined approach and valuebased culture has helped us become one of the most reliable, employee centric, customer obsessed and sustainable companies in the country, with an unflinching commitment to safety that has underpinned all our operations to date. Our first year has given us a strong operating and financial platform to execute on our continued growth ambitions".

"We have many people to thank in this journey of planning and execution. First, I want to thank every member of the Akasa family, who bring in vast experience from global aviation and who have dedicated themselves to our shared vision and our collective success. The trust and dedication that the women and men of Akasa have placed in our organisation, has made every day of these last 12 months possible.

We are grateful for our partners who have placed immense trust in our plans and supported us in our seamless execution. We consider ourselves extremely fortunate to have had the DGCA's continuous support on all the required regulatory guidance to date and the Ministry of Civil Aviation's steadfast drive to propel the growth of this industry. Above all, I want to take this opportunity to thank the late and

great Mr. Jhunjhunwala, who seeded the ability that enables us to deliver on our ambitious roadmap. We cannot thank him enough for being an early believer and for putting his faith in us to build a world-class airline", he added. "Our first year has built the foundation for the long term, and we feel incredibly optimistic as we continue to invest in our future - one that we hope will serve generations of Indians for a long time to come", Vinay concluded.

SpiceJet Net Profit jumps 126% to INR 205 Crore in Q1 FY2024 as against a loss of INR 789 Crore in Q1 FY2023



SpiceJet reported a Net Profit of INR 205 Crore for the quarter ending June 2023, an increase of 126% as compared to the Net Loss of INR 789 Crore in Q1 FY2023 owing to a strong demand for air travel in India. For the same comparative period, operating expenses were INR 1,291 Crore as against INR 2,072 Crore. On an EBITDA basis, profit was INR 525 Crore for the reported quarter against a loss of INR 393 Crore for the quarter ending June 30, 2022. Total operating revenue for the reported quarter was INR 2,002 Crore as against INR 2,457 Crore in the same guarter of the previous year.

SpiceJet lowered its Net Loss to INR 1,503 Crore in FY2023 compared to INR 1,725 Crore in FY2022. For the same comparative period, SpiceJet reported operating revenue of INR 8,869 Crore in FY2023 as against INR 6,557 Crore in FY2022.

SpiceJet completed the hive-off of

its logistics platform into a separate entity, SpiceXpress and Logistics Private Limited effective April 1, 2023.

Consequent to the hive-off there is an improvement of net worth in SpiceJet to the tune of INR 2,557 Crore (from negative INR 4,288 Crore to negative INR 3,232 Crore i.e. positive variance by 25%).

Ajay Singh, Chairman and Managing Director, SpiceJet, said, "I am happy that despite facing multiple challenges, we have posted a profit in Q1 FY2024. Our team's relentless efforts and dedication and the continuous support from our valued customers have been pivotal in this success. I firmly believe in the potential of our airline, and I am pleased to have contributed to its growth by infusing INR 500 Crore into the Company. This infusion will help bolster our efforts in reviving our grounded planes, for which we have been working tirelessly, strengthening our fleet and expanding our cargo operations."

"Our logistics arm continues to soar. Its exceptional performance, with sustained profits, has been a driving force, contributing to our overall success. We remain focused on adapting to the changing landscape of the aviation industry, identifying and seizing new opportunities, and steering our airline towards greater heights."

IndiGo to operate all international flights from Terminal 2, effective August 31, 2023

IndiGo, India's preferred airline, will be operating all international flights to and from Bengaluru from Terminal 2 and all domestic flights from Terminal 1, starting from August 31, 2023, onwards, as directed by Kempegowda International Airport, Bengaluru.

IndiGo has taken measures to ensure passengers are informed of this change. IndiGo is reaching out to all impacted passengers and their respective travel



agents via SMS, calls, and emails provided in reservation details. IndiGo passengers are requested to retrieve their PNR on IndiGo's website or mobile app to check their terminal before leaving for the airport. The airline is committed to providing a safe and hassle-free travel experience onboard its lean, clean flying machine

Akasa Air welcomes its 20th aircraft in India



Akasa Air. India's most dependable airline, welcomed its 20th aircraft, becoming the first airline in Asia to add the 737-8-200 variant of the Boeing 737 MAX aircraft to its rapidly expanding fleet. Bearing the registration VT YAV. Commenting on the successful induction of Akasa Air's 20th aircraft, Vinav Dube - Founder and Chief Executive Officer, at Akasa Air said, "Akasa Air is merely an expression of what India is capable of achieving. Today's landmark addition to our fleet, heralds the international chapter of growth in Akasa's story, and makes us extremely optimistic about our future. We are very excited at the prospect of showcasing our unique and distinct service to the world. Going from 0 to 20 aircraft within 12 months is not just an Akasa record but a record that encapsulates the potential of our great

country and one for our whole nation to be proud of".

"I am particularly gratified in the way our airline has grown. The unprecedented pace of our expansion is fuelled by the passion of our employees, who strive to make air travel increasingly accessible and reliable. We have recorded the highest on-time performance for several consecutive months in 2023 and are especially proud to have achieved this milestone without compromising on our unflinching commitment to service leadership", Vinay added.

The Boeing 737-8-200 aircraft aligns with Akasa Air's continued efforts to control operating costs while enhancing the customer experience. In addition to being the most environmentally progressive aircraft, the best-in-class legroom complements Akasa Air's commitment towards building an airline that is customer obsessed, economically sustainable and socially responsible.

"This milestone symbolizes the strength of our partnership with Akasa, as they take delivery of the first 737-8-200 in the Asia region," said Brad McMullen, Boeing senior vice president of Commercial Sales and Marketing. "The 737-8-200 offers a balance of airline economics and unparalleled customer experience that is a perfect fit for Akasa and allows the airline to deliver on its promise of service excellence."

Star air adds third Embraer E175LR aircraft to its fleet



Star Air, a leading regional airline is happy to announce the acquisition of

its third Embraer E175LR aircraft. With the addition of this new aircraft, Star Air becomes the largest privately held regional airline in India with a fleet of 8+ aircraft. This significant addition marks another milestone in Star Air's journey towards enhancing connectivity and delivering an unparalleled travel experience to its valued passengers.

The Embraer E175 is a state-of-theart regional jet that is known for its low noise, advanced technology and has a spotless safety record. Star Air's dedication to sustainability is further emphasized by the Embraer E175LR's advanced environmental performance. The aircraft's fuel-efficient engines and reduced emissions align seamlessly with Star Air's commitment to reducing its carbon footprint and contributing to a greener future for the aviation industry.

Its interiors are equipped with modernized features and seats which are ergonomically designed which will offer ample legroom and space to recline, and yet no middle seat providing an unparalleled level of comfort., offering 12 Business Class seats in a 1 - 2 seating layout with a luxurious 36" seat pitch and 64 Economy Class seats in a 2 - 2 seating layout with a spacious 31" seat pitch.

"We are delighted to welcome our third Embraer El75LR aircraft to our growing fleet," said Mr. Sanjay Ghodawat, Chairman, Star Air. "I congratulate each individual at Star Air for the fast paced growth and their true dedication to Connecting Real India. With network extensions this aircraft will enable, I am confident we will touch more regional towns in India."

With the addition of the third E175 aircraft, Star Air is poised to expand its network to include new and exciting destinations, ultimately providing travelers with more options to explore and experience. This achievement highlights Star Air's steadfast commitment to delivering excellence in every aspect of its operations.

Embraer's E195-E2 achieves type certification milestone in China



Embraer's E195-E2, the flagship of the E-Jet series, has secured its official Type Certificate from the Civil Aviation Administration of China (CAAC). Building on the E190-E2's CAAC certification received just last November at the Zhuhai Air Show, this achievement underscores the expanding approval of Embraer's innovative aircraft lineup.

According to Embraer's comprehensive 20-Year Market Outlook released in June, the Asia Pacific region, including China, is poised for robust growth, projecting a 4.4% annual increase in revenue passenger kilometres (RPKs) over the next two decades. The surge in demand for agile options to complement narrow-body planes is stimulating interest in the sub-150-seat segment within China's aviation market

Last November the Embraer E195-E2, known as the 'TechLion,' proudly touched down in China, making its debut appearance at the Zhuhai Airshow. The aircraft showcased its exceptional capabilities, including outstanding performance metrics, impressively low noise and emissions levels and an unparalleled cost efficiency.

Having entered commercial service in 2019 with Azul, the E195-E2, the largest entrant in the E-Jet family, offers seating arrangements for 120 to 146 passengers. It stands as a paragon of fuel efficiency among single-aisle aircraft currently in operation, boasting a remarkable 25% improvement in fuel efficiency per seat compared to its E-Jet predecessors.

A milestone of particular significance was reached in June 2022 when the E195-E2 underwent successful trials with 100% sustainable aviation fuel (SAF). This achievement underscores the compatibility of the E2 family with high-blends of SAF, up to 100%, without compromising safety or performance standards. Notably, the E2 series exhibits a remarkable 25% reduction in CO2 emissions compared to priorgeneration aircraft and this reduction could potentially surge to 85% with the utilisation of SAF.

DAE to acquire order book of 64 Boeing 737 MAX aircraft



Dubai Aerospace Enterprise (DAE) has released that an affiliate has signed a definitive agreement to acquire the rights, interests, and obligations of a portfolio of 64 Boeing 737 MAX aircraft from a wholly-owned subsidiary of China Aircraft Leasing Group Holdings Limited (CALC). The portfolio includes 737-8, 737-9 and 737-10 variants. Delivery of the aircraft is scheduled to occur between 2023 and 2026.

The 737 MAX airplane family delivers enhanced efficiency, improved performance and environmental increased passenger comfort to the single-aisle market. Powered by CFM International LEAP-1B engines and advanced technology winglets, the 737 MAX reduces fuel use and emissions by 20% compared to airplanes it replaces. The 737-10 is the largest model in the 737 MAX family and can seat up to 230 passengers in a single-class configuration, flying up to 3,300 miles.

The fuel-efficient jet can cover 99% of single-aisle routes.

DAE's Chief Executive Officer, Firoz Tarapore commented, "We are delighted to be able to conclude this transaction with CALC to acquire a unique portfolio of 100% newtechnology, fuel-efficient single-aisle aircraft".

On a pro forma basis, this transaction will increase the percentage of new technology, fuel efficient aircraft in DAE's owned fleet to approximately 66% from 50%. The transaction will increase the fleet of owned, managed, committed and mandated-to-manage aircraft to approximately 550 aircraft, valued at approximately US\$20 billion (£15.75 billion).

Furthermore, this transaction will allow the company to further deepen its existing relationship with Boeing and CFM International. Since inception and including this transaction, DAE has acquired and is committed to acquire approximately 500 Boeing aircraft.

Approximately 20% of the acquired portfolio is on lease to airline clients who are also existing clients of DAE, with the remainder of the acquired portfolio of assets to be placed directly by DAE in the coming quarters. The transaction is expected to be completed in the third quarter of 2023.

Namaste Hong Kong: IndiGo recommences direct connectivity to Hong Kong

IndiGo has announced the recommencement of operations between Delhi and Hong Kong, enhancing direct connectivity. This route not only strengthens the ties between the two dynamic cities but also underscores Hong Kong's significance as a vital business and travel hub in the Asia-Pacific region. Starting October 05, 2023, these flights are tailored to cater to the escalating travel and trade



demands between India and Hong Kong, providing customers with an extended range of flight options to enhance accessibility and facilitate seamless travel.

Mr. Vinay Malhotra, Head of Global Sales, IndiGo said, "We are delighted to reintroduce our daily direct flights connecting Delhi and Hong Kong, starting this October. The Asia-Pacific region has witnessed a remarkable resurgence in air travel demand and passenger traffic over the past few months, signaling a vibrant rebound. Hong Kong occupies a pivotal role as a favored destination for both Indian tourists as well as enterprising business travelers. As a frontrunner in the aviation domain, we are resolute in meeting this surging demand by expanding flight options to bolster accessibility and catalyze economic growth. Furthermore, Hong Kong's thriving business and trade opportunities, underscore its vital role in connecting markets and fostering trade ties. We will continue to enhance international connectivity and remain committed to our promise of providing on-time, affordable, courteous, and hassle-free travel experiences to our customers. across our wide network."

Puneet Kumar, Director, South Asia, and Middle East of Hong Kong Tourism Board said, "We are excited to welcome back IndiGo connecting India to Hong Kong. Hong Kong will now be more accessible for visitors from different parts of India, who will be delighted with our vibrant and diverse city offering -everything from world class museums, historic architecture, brandnew attractions, incredible dining, and nightlife and, beyond its iconic skyline, refreshing hiking experiences in beautiful green outdoor landscapes."

CAE signs ten-year pilot training agreement with Batik Air



CAE has secured a ten-year pilot training agreement with Batik Air. CAE will deploy and operate an advanced B737 MAX full-flight simulator at Batik Air's facility in Kuala Lumpur, ensuring a world-class training experience for the airline's pilots.

In addition, Batik Air will adopt the use of CAE RiseTM, CAE's data-driven training system which leverages advanced analytics to deliver more effective training and enhance operational safety.

This milestone agreement solidifies the long-term relationship between CAE and Batik Air, underscoring their unwavering commitment to fostering the development of highly skilled pilots. In its recently released 2023 Aviation Talent Forecast, CAE projected a substantial need for aviation professionals in various sectors. Airlines are projected to require 252,000 pilots, 328,000 maintenance technicians, and 599,000 cabin crew members over the next decade.

"We are proud to appoint CAE as our training partner and we are confident that this partnership with CAE will further enhance our pilot training and standards," said Group Strategy Director of Batik Air and Lion Air Group, Datuk Chandran Rama Muthy. "The CAE B737 MAX simulator will enable our pilots to have real-time handling aircraft experience during the training, which in turn will ensure that our pilots possess the skills and assurance to navigate the skies with confidence."

"With CAE Rise $^{\text{TM}}$, Batik Air pilots will benefit from an industry-leading

solution that will elevate their training experience in the simulator and sharpen their skills in the flight deck." states Michel Azar-Hmouda, CAE's Vice President, Commercial Aviation Training.

Malindo Air officially rebranded as Batik Air in April 2022, in line with the Lion Group's goal to establish a common identity for full-service airlines within the group. Batik Air operates from the Kuala Lumpur International Airport (KLIA) and the Sultan Abdul Aziz Shah Airport (SZB, Subang SkyPark Airport). The carrier currently operates a fleet of A330 – 300, B737-8, B737-800 and ATR72-600 aircraft for domestic and international flights.

Airbus Opens New A321XLR Equipment Installation Hangar



Airbus is advancing its industrial system and expanding ramp-up capacity with a new automated A321XLR equipping hangar, officially opened by Hamburg's First Mayor Peter Tschentscher and German Aerospace Coordinator Anna Christmann. With this, Airbus continues its modernisation and digitalisation of its industrial system and expands its capacity for the rate ramp-up in the A320 programme to 75 in 2026.

"Airbus' Hamburg site plays a significant role in the development and production of the A321XLR. With our new, state-of-the-art equipment installation hangar,

we are now expanding our capacity to manufacture A321 fuselages and making an important contribution to supporting our ramp up. At the same time we are reaffirming the importance of Hamburg for Airbus," said André Walter, Head of Airbus Commercial Aircraft Production in Germany. "The design of the building reflects the latest standards in production and sustainability."

Dr Peter Tschentscher, First Mayor of the Free and Hanseatic City of Hamburg: "Hamburg is the central location for Airbus' single-aisle development and production. With the A321XLR, the new flagship of the A320 Family will be assembled at the Finkenwerder site, setting new standards in terms of sustainability, efficiency and range. The start of production in the new equipment installation hangar is an important project for Hamburg as the world's third largest civil aviation center."

"This investment in the A321XLR equipment installation hangar at the Airbus Hamburg site is an important milestone towards transitioning aviation to climate neutrality. This transformation is the key to making Germany a future-oriented and competitive aerospace location." said Anna Christmann, the Federal Government Coordinator of German Aerospace Policy. "I am delighted that Airbus is positioning itself as a trailblazer in sustainable aviation and that we are pulling together to accelerate progress toward climate-neutral aviation even further."

Embraer and CAE to expand global E-Jet E2 training network

Embraer and CAE reported the expansion of their longstanding joint venture to include pilot and cabin crew training for the Embraer E-Jet E2 family of commercial aircraft.



Embraer-CAE Training Services (ECTS) will launch a new pilot training program and deploy a state-of-the-art E-Jet E2 full-flight simulator (FFS) at the Singapore-CAE Flight Training Centre where training is scheduled to begin in December 2023. E2 pilot and cabin crew training programs will be gradually expanded to strategic locations within CAE's global network to support aircraft deliveries.

ECTS' training solutions are a core offering of the Embraer Services & Support platform. The platform assembles the entire portfolio of products and solutions to deliver the best services and support experience, and leverages the after-sales business to intensify its presence and enhance support on a day-to-day basis, generating more value to customers. The E2 training program will feature CAE 7000XR Series full-flight simulators (FFSs), including the innovative CAE Tropos™ 6000XR visual system, as well as CAE XR Series' flight training devices (FTDs)

Singapore has been chosen as the first location due to the growing E-Jet E2 fleet in the Asia Pacific region. The establishment of the full flight simulator and pilot training program enhances Embraer's value proposition in the APAC region.

"Adding the E-Jet E2 platform to our existing joint venture is a natural next step in the partnership CAE and Embraer have built over the last 16 years," said Michel Azar-Hmouda, Vice President, Commercial Aviation Training, CAE. "Launching the new program in Singapore brings E2 training closer to our APAC customers and ensures their pilots are ready to take flight as E2 jets join their fleets."

Eve Air Mobility Announces Johann Bordais as Chief Executive Officer



E mbraer has released that Johann Bordais will transition from President and CEO of Embraer Services & Support to assume the role as CEO of Eve Air Mobility, effective September 1, 2023. The new Services & Support leadership will be announced in the coming weeks.

"I am very grateful for Johann and his exceptional leadership, relentless focus on the customer experience and excellent results achieved in his 23 years dedicated to the Services & Support area," said Francisco Gomes Neto, President and CEO of Embraer. "I am sure he will add significant value to Eve's team during this new phase of the company and will consolidate Eve as a leading player in the new UAM industry."

Having been with Embraer since 2000, Bordais has played a key role in transforming the services area into a global, fast-growing, and profitable business. During his tenure, Services & Support became Embraer's fast-growing and most profitable business of the company, with reported revenues of US\$1.27 billion (£1.00 billion) in 2022, accounting for 28% of Embraer's total revenue.

Since the creation of the Services & Support unit in 2016, Bordais has been responsible for integrating various service activities, structuring a global support network and providing a broad portfolio of solutions for Commercial Aviation, Executive Aviation and Defence customers, with more than 2,300 people dedicated to serving its customers and their more than 5,700 aircraft worldwide.

Ravis Brassington named Vice-President, Group Safety

estJet is pleased to announce the appointment of Travis Brassington to the role of Vice-President, Group Safety. With more than ten years' experience working across various flight operation functions at the WestJet Group, Brassington will join WestJet's operational leadership team effective immediately.

"I am thrilled to welcome Travis to the operational leadership team at such a dynamic time in aviation," says The WestJet Group Chief Operations Officer, Diederik Pen. "At WestJet, safety is at the forefront of every decision we make, and we are proud to continuously put Safety Above All. Travis' commitment to safety and decades of experience as a pilot makes him the ideal person to lead our Safety Above All mandate and I look forward to leaning on his expertise in this area."

Brassington joined WestJet in 2011 after more than 20 years in the Royal Canadian Air Force as a senior officer and CF-18 fighter pilot. He is a Calgary-based Captain on the 737 and has been instrumental in WestJet's recruitment



efforts as a member of the Pilot Selection Team since 2014, most recently as Pilot Hiring Manager. Additionally, Brassington also holds a Master of Business Administration from the University of Fredericton.

"Safety has been at the core of everything I've done since the moment I joined WestJet," says Brassington. "I am deeply humbled by this opportunity and will continue to lead with the highest standards of safety for WestJetters and our guests. WestJet has always been an industry leader in safety, and I plan to continue this legacy during my tenure."

Joramco welcomes Thomas Bjorndal as Chief Commercial Officer

A mman, Jordan — Joramco, the Amman-based aircraft maintenance, repair, and overhaul (MRO) facility and engineering arm of Dubai Aerospace Enterprise (DAE), is excited to announce Thomas Bjorndal's appointment as the new Chief Commercial Officer.

Thomas is an aviation professional with an impressive track record spanning over four decades. Throughout his career, he has excelled in both maintenance and commercials, holding leadership roles across various locations around the world. Prior to joining Joramco, Thomas was the Head of Base Maintenance Services Management at Swiss International Air Lines (Swiss). Before joining Swiss Thomas was the Manager of Line Maintenance at Qatar Airways. In his new role at Joramco,



he will lead the Commercial department to drive growth and enhance customer experience.

Commenting on Thomas's appointment, Chief Executive Officer, Fraser Currie, said, "We are delighted to welcome Thomas as the newest member of our C-suite management team at Joramco. Thomas's contribution will be a key factor in achieving our strategic growth plans based on our vision and goals."

Boom Supersonic Names Global Propulsion Leader as SVP of Symphony

B oom Supersonic, the company building the world's fastest airliner, Overture announced that Scott Powell has joined as the company's Senior Vice President of Symphony™, the propulsion system for Overture. In this role, Powell will be responsible for leading the development, industrialization, certification, and integration of Symphony. Powell brings nearly four decades of propulsion leadership in some of the world's premier aerospace programs.

In December 2022, Boom announced the development of the Symphony propulsion system designed and optimized for Boom's Overture supersonic airliner. The bespoke engine is designed to deliver 25% more time on wing and provide 10% operating cost savings to airline customers. Boom has teamed with three industry leaders to develop Symphony including Florida Turbine Technologies (FTT) for engine design and initial production, GE Additive for additive technology design consulting, and StandardAero for maintenance.

"We've made significant design



progress on Symphony," said Blake Scholl, founder and CEO of Boom. "Adding Scott's leadership and experience overseeing certifications for a wide range of civil and military propulsion systems only further strengthens our path forward

with Symphony. We're thrilled to have him onboard."

Prior to joining Boom, Powell spent 38 years at Boeing, which included four years as the Engineering Propulsion Leader for the Dreamliner leading to the 787-8/-9, responsible for propulsion system design, development, test, build, and business management. He also managed complete propulsion integrated product teams through design and development, qualification, certification, and flight testing for legendary airframes such as KC-46 Tanker, and Joint Strike Fighter. Most recently, he served as the Propulsion Integrated Product Team (IPT) Leader for the B-52J Commercial Engine Replacement Program.

"Boom understands the significant upside that can be achieved through an engine specifically customized for Overture," said Scott Powell, Boom's Senior Vice President of Symphony. "I'm inspired by the considerable progress already achieved with Symphony, and I look forward to working with the team on the propulsion system that will power the future of sustainable supersonic travel."

SHANTANU ROY TAKES CHARGE AS CMD OF BEML LIMITED

hantanu Roy has assumed charge as the next Chairman & Managing Director (CMD) of BEML Limited, a Schedule 'A' company under the Ministry of Defence. Roy was holding the position of Director (Mining & Construction Business) and has over 30 years of extensive experience in capital goods sectors for defense, mining & construction, transportation, transmission, renewable, and large power projects.

Experience & qualifications

Roy holds a graduate degree in Electrical Engineering from NIT-Raipur and also an MBA in Financial Management.



He has served as Executive Director of BEML, responsible for the International Business Division, Strategy &New Initiatives, Coordination and Northern region operations, before assuming his current position in February 2023. As a six-sigma black belt certified professional, he is well-versed in various models of project financing, mechanisms and processes for financial closure of large projects, international laws, arbitration rules, international legal & arbitration cases, and statutory & legal compliances.

He is married to Piyali Roy, a post graduate in MSc & MA in Education. They are blessed with a son Abhigyan Roy who is pursuing Masters in Finance and a daughter Aditi Roy pursuing graduation in Biotechnology.

Aviation Update Editor Kartikeya in conversation with

Mr. Nitin Sangwan IAS

Director - Civil Aviation, Government of Gujarat

GUJSAIL has been entrusted with creating key aviation infrastructure in Gujarat, including a world-class international airport and a network of airstrips. How effective has the business been in reaching these goals?

With its defined role GUJSAIL has wholeheartedly dedicated itself to revolutionizing the skies and has been well positioned to contribute to the unparalleled growth of the aviation sector in our state.

Whether it is the establishment of

notch MRO facilities, modernization and upgrading of airports and airstrips or the swift development of seaplane services and water aerodromes GUJSAILs vision aims to ensure state of the art civil aviation infrastructure in Gujarat thereby playing a pivotal role in the state's overall success.

Over time GUJSAIL has proven successful in fostering the expansion of air travel hubs and promoting safety within the industry. It provides services while also establishing Gujarat as a hub, for aviation development

knowledge sharing and human resource advancement.

Could you please share with us the most recent/ upcoming projects and initiatives undertaken by GUJSAIL in the civil aviation sector to ensure its long-term development?

Aviation has included seaplane operations from water aerodromes under UDAN, the Civil Aviation Department of the Government of Gujarat and



GUJSAIL have taken pioneering efforts in creating India's first seaplane service. The Airport Authority of India (AAI) has approved seaplane routes linking 12 water aerodromes, three of which are in Gujarat: Sardar Sarovar Dam (Statue of Unity), Ahmedabad's Sabarmati Riverfront, and Dharoi Dam.

We are also aiming to build or expand airstrips at Ankleshwar, Rajpipla, Morbi, Mandavi, Keshod, Dwarka and Ambaji in future. GUJSAIL is also aiming to build permanent heliports. One of our significant endeavours would be the Rajkot Aviation Park.

Among other things, the Park will contain a museum, an airfield, a training school, and etc. It will create awareness among students, professionals, legislators, and corporate organisations about the aviation sector's potential for growth. An Aviation Park can grow into a one-stop shop for aerospace training, research, recreation, production, and leasing. We also anticipate additional flying schools in Gujarat.

In addition, the Government of India has designated 'GIFT-City' in Gujarat's state capital of Gandhinagar as a 'Special Economic Zone' (SEZ) to promote the air-finance and leasing business.



To encourage local entrepreneurs and firms to create such aviation-related operations, GUJSAIL wants to develop property near the projected Ankleshwar airport for MRO and other aviation-related amenities.

Gujarat possesses enormous potential for aviation-related activities such as aerosports, aeromodelling, and heli-tourism. What activities does GUJSAIL undertake to promote these?

We were aware that it was crucial to generate interest in and knowledge of the diaspora involved with any activity before initiating it. Due to this, GUJSAIL has included airport activities in the curricula of several local schools, where students receive instruction in the construction of aircraft models, aerodynamics, aero model flying, etc.

Also Gujsail provided a flight stimulation bus to the Department of Science & Technology in Science City, Ahmedabad, to spark interest. This is also assisting us in igniting student interest in aviation.

In the future, GUJSAIL and IIT Gandhinagar will sign an MOU to advance drone and aero sports.

In addition to this, we also organised an aviation sport competition that was a big success in Mehsana, Amreli, Ahmedabad, and Rajkot and received ground-breaking support from the State's citizens.

What is GUJSAIL's role in developing state airports and airstrips?

The Government of Gujarat founded GUJSAIL to promote the development of aviation infrastructure in Gujarat. It intends to build additional airports and airstrips at multiple locations as shared earlier and has already begun work on some of them.

Another area of concentration for GUJSAIL is developing support aviation infrastructures such as MRO, Aviation Training, Institutes, and Aviation Parks. Could you please elaborate?

The development of MROs in India is critical to the expansion of the aviation industry. The area from which industry may profit monetarily if India was



diverted to a neighbouring country, resulting in lost business and job prospects in India as well as a loss of foreign cash. GUJSAIL acknowledges the reasons for such outflows and intends to reverse this trend. A current example for this MRO in Ahmedabad, which has had 80 inspections in a short period of time. This facility handles aircraft inspections, airframe maintenance, and repair.

GUJSAIL is also planning an MRO in its upcoming airstrip at Ankleshwar in the Bharuch District. Ankleshwar's vantage point location, close to the airports of Mumbai and Ahmedabad, puts it in an opportune position to reap the benefits of catering to strong demand. Because of its proximity to the shipping port and the DMIC Corridor, Ankleshwar has a competitive advantage over other MROs. Once operational, the Ankleshwar MRO would be able to serve the airports of Baroda,

Surat, Mumbai, Ahmedabad, and Indore.

With all of the above initiatives, GUJSAIL recognises the importance of Human Resources. GUJSAIL has also planned to establish an Aviation Training Institute at Mehsana, Amreli Airfield, complete with world-class training facilities and cuttingedge aviation technology.

Could you discuss your ambitions and aspirations for GUJSAIL and the State's civil aviation sector with us? What are the problems to be overcome and the goals to be attained?

To be the most favoured destination for aviation stakeholders, the state civil aviation sector should be the finest destination for airline operators, airport operators, MROs, and general aviation. As a central issue, aviation faces

greater obstacles at the state level than other industries such as energy, health care, and so on. We are developing the State Civil Aviation Policy to address this. The Policy will target all aspects of aviation, including MRO, regional connectivity, aviation training, aero sports, and manufacturing, with a definite result in mind. It will also provide all those involved in the manufacture of aviation products with a transparent, fair, and level playing field, similar to the benefits provided to other industries in the state.

Another issue that appears nowadays is the scarcity of qualified and experienced resources in aviation. It is not due to a lack of student enthusiasm, but rather to a lack of personalised guidance. GUJSAIL intends to raise awareness so that such resources are used primarily in aviation and not in other sectors such as tourism or industry.



Boeing Appoints Alvin Liu as China President

The Boeing Company today announced the appointment of Alvin Liu as president of Boeing China, effective Sept. 1. Liu has been serving in the role of president on an interim basis since July 10, following the announcement that his predecessor, Sherry Carbary, plans to retire later this year, concluding a distinguished, 34-year career at Boeing.

In his new role, Liu will be responsible for developing and implementing Boeing's growth and partnership strategies in one the company's largest commercial markets. He will be based in Beijing and report to Dr. Brendan Nelson AO, president of Boeing Global.

"China continues to be of critical importance to The Boeing Company and we are very fortunate to have Alvin lead our efforts here and build on the great partnership with our Chinese customers and other stakeholders," said Dr. Nelson. "Alvin has a unique understanding and deep appreciation of this market based on more than 20 years of senior leadership experience here."

Prior to his appointment as Boeing China president, Liu led the company's Government Operations team in China where he oversaw relations with key officials



and partners, as well as education and community-outreach programs, across the country.

"I am honored and excited for the opportunity to help expand on the incredible, 50-plus-year foundation of success and partnership that Boeing has built in China," Liu said. "Nearly 8,500 new airplanes, and \$550 billion in commercial services, will be needed over the next 20 years in China and I am committed to making sure our team is ready to support our customers and meet that demand."

A native of Liaoning Province, Liu brings more than two decades of senior leadership experience in China to the position, including as vice chairman of Ford's Greater China Operations, vice president and general counsel of Ford's International Market Group, along with leadership roles at Chrysler and DaimlerChrysler AG.

AIR MARSHAL NAGESH KAPOOR TAKES OVER AS AIR OFFICER-IN-CHARGE PERSONNEL

A ir Marshal Nagesh Kapoor took over as Air Officer-in-Charge Personnel (AOP) on 01 Sep 23. On the occasion of taking over, he laid wreath at the National War Memorial and paid homage to those who have made the supreme sacrifice for the nation.

An alumnus of the Defence Services Staff College and National Defence College, the Air Marshal was commissioned in the fighter stream of Flying Branch of the Indian Air Force on 06 December 1986. In a career spanning over 36 years, the Air Marshal has held various key field and staff appointments. Prior to his present appointment, he was



Senior Air Staff Officer at HQ Central Air Command, Prayagraj.

In recognition for his meritorious services, he was awarded Vayu Sena Medal in 2008 and Ati Vishisht Seva Medal in 2022 by the Hon'ble President of India.

Luc Tytgat appointed Acting Executive Director of EASA



L uc Tytgat has been appointed Acting Executive Director of the European Union Aviation Safety Agency (EASA) with effect from September 1, 2023. Tytgat replaces Patrick Ky, who is leaving the Agency at the expiry of his second five-year mandate.

Tytgat joined EASA as Director of Strategy and Safety Management in January 2015 after having been responsible for air transport and space domains in the European Commission.

In his role at EASA he successfully increased the level of safety intelligence and developed a better and more agile regulatory framework. He set the strategic direction for key challenges faced by the sector, such as the need to reinforce the Agency's role in countering climate change and emerging safety risks such as cybersecurity, conflict zones and health. EASA's research and innovation as well as international cooperation activities also expanded significantly under his guidance.

Tytgat will be succeeded as Director of Strategy and Safety Management by Maria Rueda, formerly Managing Director at CAA International (CAAi), who will take up the role from October 1, 2023. Rueda joined the UK CAA's international cooperation and training arm in 2011 and rose to lead the organisation in 2015. Earlier, she held senior positions at Deloitte and had been Business Development Director at George Best Belfast City Airport.

"My task in the coming months is to ensure that the Agency continues to deliver on its many projects and that our operational and reputational position remains intact, so that the new Executive Director can begin the new role at full speed." Tytgat said.

LCA Tejas successfully test-fires indigenous ASTRA Beyond Visual Range air-to-air missile off Goa coast

ejas, Light Combat Aircraft (LCA) LSP-7 successfully fired the ASTRA indigenous Beyond Visual Range (BVR) air-to-air missile off the coast of Goa on August 23, 2023. The missile release was successfully carried out from the aircraft at an altitude of about 20,000 ft. All the objectives of the test were met and it was a perfect text book launch.

The test launch was monitored by the Test Director and scientists of Aeronautical Development Agency (ADA), Defence Research and Development Organisation (DRDO), Hindustan Aeronautics Limited (HAL) along with officials from Centre for Military Airworthiness and



Certification (CEMILAC) and Directorate General of Aeronautical Quality Assurance (DG-AQA). The aircraft was also monitored by a Chase Tejas twin seater aircraft.

ASTRA, a state-of-the-art BVR airto-air missile to engage and destroy highly maneuvering supersonic aerial targets, is designed and developed by Defence Research and Development Laboratory (DRDL), Research Centre Imarat (RCI) and other laboratories of DRDO. The indigenous Astra BVR firing from home grown Tejas fighter is a major step towards 'Aatmanirbhar Bharat'.

Raksha Mantri Shri Rajnath Singh has complimented ADA, DRDO, CEMILAC, DG-AQA and the industry for the successful firing of the missile from Tejas-LCA. He said the launch would significantly enhance the combat prowess of Tejas and reduce the dependency on imported weapons.

Secretary, Department of Defence (R&D) and Chairman DRDO has also congratulated the teams involved in the successful launch.

Boom Supersonic Advances Flight Preparations for XB-1

B oom Supersonic, the company building the world's fastest airliner, Overture announced it has completed several key milestones for XB-1, Boom's technology demonstrator aircraft. XB-1 leverages 60 years of progress in airplane technologies like carbon fiber composites, advanced avionics, and digitally-optimized aerodynamics to enable sustainable supersonic travel.

Earlier this year, XB-1 was moved from the company's hangar in Centennial, Colorado to the Mojave Air & Space Port in Mojave, California to continue preparations for flight. The aircraft has undergone extensive ground testing since arriving, including taxi testing this week.

"The recent progress made towards XB-1's first flight reflects the team's collective efforts to build and safely fly the world's first independently developed supersonic jet," said Blake Scholl, Boom Supersonic's founder and CEO.

In addition to the ongoing testing, XB-1 recently received an experimental airworthiness certificate from the Federal Aviation Administration (FAA), following a detailed aircraft inspection. Boom has also



secured letters of authorization to allow Chief Test Pilot Bill "Doc" Shoemaker and test pilot Tristan "Gepetto" Brandenburg to fly XB-1. Additionally, letters of agreement with airspace authorities are in place allowing for flights of the aircraft over the Mojave desert. XB-1's historic first flight will occur in the same airspace where Captain Charles "Chuck" Yeager first broke the sound barrier in the Bell X-1 and the Mach 3+, strategic reconnaissance SR-71 "Blackbird" first flew in 1964.

XB-1 has provided the company with valuable learnings, including the development of a robust safety culture. In preparation for flight, Boom's test pilots have completed hundreds of hours in the simulator for aircraft evaluation, operations development, training, and human

factors assessments to achieve the highest levels of safety. The test pilots also maintain flight proficiency in a T-38 trainer aircraft, the same aircraft that will be used as a chase plane for all flight tests of XB-1. To further increase safety, the test pilots will use the T-38 to practice formation flying.

"It's fitting that XB-1 is now progressing toward first flight at the Mojave Air & Space Port, home to more than 50 first flights and other significant aviation events," said Bill "Doc" Shoemaker, Chief Test Pilot for Boom Supersonic. "I'm looking forward to flying XB-1 here, building on the achievements of other talented engineers and pilots who inspire us every day to make supersonic travel mainstream."

Lockheed Martin Announces European F-16 Training Center in Romania



L ockheed Martin and the governments of Romania and the Netherlands have announced a Letter of Intent to establish the European F-16 Training Center in Romania.

"The F-16 continues to play a crucial role in 21st Century Security missions for the United States, Europe, NATO and allies around the world," said OJ Sanchez, vice president and general manager, Integrated Fighter Group. "Lockheed Martin is proud to partner with the Netherlands and Romania on this European F-16 Training Center in Romania, which will enhance mission readiness through a comprehensive F-16 training solution for Romanian pilots." The center will focus on ensuring effectiveness and safety of Romanians flying and operating F-16 fighter jets and could eventually expand to include training for other nations.

"Once details are finalized, we are confident the training center will ultimately benefit Romania and other regional F-16 operators, including potentially Ukraine," added Sanchez.

Lockheed Martin has supported F-16s worldwide for decades, with extensive experience in pilot and maintainer training. Aircrews from the Netherlands and Romania currently train with Lockheed Martin F-16 simulators, and this training center will support readiness through an affordable, efficient sequence of ground-based and flight training missions.

There are hundreds of F-16s operating across Europe today, enabling multiple European countries, including Romania, to protect airspace and be part of a web of integrated NATO peacekeeping coverage. Lockheed Martin continues to work side by side with European operators to modernize the F-16 to remain ahead of the evolving threat.

BAE to Develop Technology for Next-generation Sensing, Imaging, and Communications Systems

The Defense Advanced Research Projects Agency (DARPA) has awarded BAE Systems' FAST Labs™ research and development organization a \$14 million contract for the Massive Cross Correlation (MAX) program. BAE Systems will develop technology aimed at enabling the deployment of advanced signal processing and computation on a new smaller category of military platforms.

Signal processing is at the heart of critical Department of Defense (DoD) technology such as sensing, imaging, and communications systems. Correlators are a vital tool in comparing, contrasting, and ultimately processing signals. Current digital correlators are large, power-hungry systems that are the size of a briefcase. BAE Systems' approach to developing analog correlators will maintain or improve performance while reducing the system to the size of a hockey puck.

"Smaller and more efficient systems improve size, weight, power, and costs to allow for full-spectrum signal processing



closer to the edge, or onto platforms operating in denied airspace," said Bryan Choi, technology development director at BAE Systems' FAST Labs. "This disruptive analog correlator technology can result in enhanced decision making, allow mission-critical technology to be deployed on smaller platforms, and create a new category of systems."

As part of the program, BAE Systems seeks to deliver a radically more power-efficient analog correlator with high dynamic range and wide bandwidth. It will enable new capabilities including synthetic aperture radar image classification and image formation, automatic target recognition, passive coherent location, and jam-resistant communications in small form factor platforms.

Elbit Systems' Partner, Hanwha, was selected for the Australian Land 400 Phase 3 Project

E lbit Systems announced that its partner in the Australian Land 400 Phase 3 project (the "Project"), Hanwha Defense Australia ("Hanwha"), has reported that it was down selected by the Australian Government, as the preferred tenderer for the Project, with final Government approval to be sought at the conclusion of contract negotiations. Hanwha further reported that Elbit Systems is a key partner to Hanwa to deliver the Redback Infantry Fighting Vehicle (IFV) under the Project.

The Redback integrates the Redback Turret which is based on the latest generation of Elbit Systems' 30 mm manned turret with the COAPS gunner sight, additional electro-optic systems, Iron Fist active protection system, Elbit



Systems' Iron-Vision advanced situational awareness head mounted display system and Elbit Systems' ELAWS laser warning system.

The anticipated contract between Hanwha and Elbit Systems is also contingent upon completion of negotiations between both parties and the Company expects the contract to be in an amount that is material to the Company.

NORTHROP GRUMMAN'S B-2 CAPABILITIES ENHANCE ITS DIGITAL COMMUNICATIONS

orthrop Grumman Corporation, in partnership with the US Air Force, successfully completed an integrated airborne mission transfer (IAMT) demonstration with the B-2 Spirit at Whiteman Air Force Base as part of the ongoing modernization efforts incorporating digital engineering.

IAMT delivers an advanced capability that enables the B-2 to complete a digital, machine-to-machine transfer of new missions received in flight directly into the aircraft. IAMT is part of Northrop Grumman's B-2 Collaborative Combat Communication (B2C3) Spiral 1 program that digitally enhances the B-2's communications capabilities in today's battlespace.

"We are providing the B-2 with the capabilities to communicate and operate in advanced battle management systems and



the joint all-domain command and control environment, keeping B-2 ahead of evolving threats," said Nikki Kodama, vice president and B-2 program manager, Northrop Grumman. "The integration of this digital software with our weapon system will further enhance the connectivity and survivability in highly contested environments as part of our ongoing

modernization effort."

The demonstration included approximately 50 mission transfers during a two-day period in partnership with the Air Force. Aircraft vehicle 1086, the Spirit of Kitty Hawk, was configured with Northrop Grumman's Multi Mission Domain (MMD) architecture. MMD is an open mission system architecture for the B-2 that allows rapid and affordable fielding of modern mission capabilities. The mission transfers utilized MMD to integrate with the B-2 Adaptable Communications Suite (ACS).

In the demonstration, the aircrew received an incoming transmission from the ACS ground station, which loaded the mission directly through MMD interfaces to the B-2 Disk Drive Unit. B-2 flight crews can now focus more on mission execution in today's dynamic battlespace thanks to progressive digital technology.

Lockheed Martin's Next Generation Interceptor Program Completes All Subsystem Preliminary Design Reviews at Accelerated Pace

ockheed Martin successfully validated designs for all elements of the nation's Next Generation Interceptor (NGI) with the U.S. Missile Defense Agency (MDA). Through a series of successful and on-schedule Preliminary Design Reviews (PDRs) of all NGI major subsystems, the company demonstrated it has achieved design maturity and reduced risk for critical technologies. NGI is the future of the MDA's Ground-Based Missile Defense (GMD) system to protect the U.S. homeland against intercontinental ballistic missile threats from rogue nations.

"Lockheed Martin is making rapid progress with our NGI solution, remaining on an accelerated schedule toward flight testing," said Sarah Reeves, vice president of NGI at Lockheed Martin. "During these reviews, we took a modern and transparent approach through the use of advanced digital engineering and model-based engineering tools. Our NGI team will continue on-plan to demonstrate our



revolutionary NGI architecture, leveraging mature technologies for high mission confidence."

Lockheed Martin is demonstrating engineering work that has been performed in the integrated digital tool chain to drive faster decision making, enhance security, and enable rapid delivery and agility. This approach emphasizes affordability across the program lifecycle. Lockheed Martin's NGI solution will increase warfighter capability, providing an improved defensive solution to address the complex battlespace now and in the future.

Lockheed Martin's NGI program is on track for its next major review, the All Up Round PDR. During this next major review, MDA will assess if the program is ready to move forward in the acquisition process through Knowledge Point number one and ultimately on to the Critical Design Review. The first Lockheed Martin NGI is forecast for delivery to the warfighter as early as FY2027.



Aviation Update Editor Kartikeya in conversation with

Mr Ashok Gopinath

President & Accountable Manager
GMR Aero Technic.

Can you brief us about the courses offered at GMR School of Aviation?

↑ GMR School of Aviation will offer a four-year licensed programme on 147 Aircraft Maintenance and Engineering approved by both DGCA (India) and EASA. These courses will be in two streams; one is the mechanical stream, which we call B1.1 and the other is the avionics stream, which we call B2. We are the first school to offer an EASA -approved combined B1.1&B2 integrated program. We have equally 50/50 seats available for that kind of stream. Mechanical streams include engineers who certify the aircraft, inspect the aircraft structure system, and operation, and perform functional checks post, which the aircraft can be released for service. Similarly, avionics is a different stream more related to electrical and electronics.

Moreover, there are several additional ancillary executive courses provided from the second or third year of the academic programme. These include Aircraft Specific Type Training Courses, Aircraft structures, Aircraft composite courses, Human Factors, Fuel Tank Safety, Safety Management Systems and so on.

Why anyone should opt for GMR School of Aviation instead of other AME schools? What is your advice to young students who wish to choose aviation as a career?

GMR School of Aviation is the first of its kind Premiere aircraft maintenance engineering school of India that offers and four year licenced programme on 147 Aircraft Maintenance and Engineering approved by both DGCA (India) and EASA. The students joining the EASA stream



have the opportunity to complete 2 year of academic in the campus and 2 year on job training in GMR Aeo Technic under EASA Part 145 environment. At the end of fourth year, they will be offered a typecourse and have an opportunity to graduate with EASA basic or a type rated licence. In addition the technical Knowledge Partner is Airbus. As a constantly growing business, there is a large appetite for manpower with the required skill sets who are readily employable. Therefore, there are plenty of opportunities that students can pursue to work with any airline and for careers abroad. Further, we are planning to get this course accredited (both domestically and internationally) and extend it to an engineering degree and BSc in Aviation. We are working with the National Aviation University here in India. With this, students can further pursue an MBA in Airline Management or Airline Operation. Other opportunities include employment in the MROs, OEMs (Original Equipment

Manufacturers), Boeing, Airbus and many others who are setting up operations in India. There is also a vast expanse in the aerospace industry, military MRO and military manufacturing, which can offer various additional opportunities.

What are the predictions we can take for Present/Future AME Shortage?

With over 1,000 aircraft orders in place, India is set to become 3rd largest Aviation market in the next 5-10 years. The Indian MRO industry is projected to grow by \$ 4Bn by FY31, compared to \$1.7Bn in FY22. Currently, more than 50% of the Aviation MRO services are being imported. One of the main reasons for this trend is the lack of availability of skilled manpower caused by the non-existence of world-class integrated aviation engineering schools in the country. The shortage of manpower will become more challenging with the opening of defence sector to civil MRO services. To address this, we have

conceptualized a school of aviation to offer globally recognized 4-year course including 2-year academic and 2-year On-job-training (OJT) in MRO along with type training.

How can we enroll for the courses at GMR School of Aviation?

The basic eligibility criteria is Class XII with Physics,
Chemistry and Mathematics. As this is a niche course, students will have to appear for an entrance exam as well. An added prerequisite is the passion for aviation.

How much will it cost to complete AME at GMR School of Aviation?

The domestic DGCA program costs 15 lakhs, while the international EASA program is priced at 30 lakhs.

To Schedule a campus visit, Please call our admission cell: +91 8121023147, +91 8121024147



Aviation Update Editor Kartikeya in conversation with

Mr. Arunakar MISHRA

MD & CEO

Genser Aerospace & Information Technologies Pvt. Ltd

Could you talk about Genser Services in India? What is unique about the solutions offered by Genser?

Niche, bespoke engineering services for all organisations engaged in or intending to enter in aviation/aerospace – globally; to complement, reduce risks, bring operational excellence and grow their brand & businesses.

Genser, established in 1997, in Bengaluru, India, delivers aerospace engineering services to its clients globally, across the spectrum of Design, Manufacturing, In-Service Support and Research & Analytics.

A clear focus, flexibility to offer niche services and agility with which it can orient to the needs of the clients, has helped Genser garner global aerospace leaders like Pratt & Whitney, Hamilton Sundstrand, Curtiss Wright, Liebherr Aerospace, UTC Power, LORD Corporation, HAL, NAL etc. as its customers.

Genser has rendered consulting to Indian Industrial Giants like BEML, Bharat Forge, Bosch (India), Mahindra, Sundaram Clayton, Titan (a Tata company) etc. to help them transition into Aerospace and develop an IT enabled platform for aerospace work transfer across geographies (to WIPRO).

Furthermore, Genser has undertaken studies on Aerospace Market survey and Strategies for Governments: UKTI (Government of UK) and Government of Victoria (Australia).

Following list provides a flavour of service offerings from Genser:

■ Delivery of aircraft parts to OEMs:

Product Specific Manufacturing Supply chain development, using "Extended Enterprise Model." Genser has employed this model for successfully delivering 1500 shipsets of actuator gears for a European Single Aisle programme over five years with Zero Turnback, 99% OTD. Genser's delivery model optimises capital investments across the industry employing Industry 4.0 and Industry 5.0

E1. Crew and Passenger oxygen bottle
E2. Instrument panel cooling vents/duc

E3. Cockpit and Cabin conditioned air E4. ECS unit E5. NACA Scoop ducts

E6. Air conditioning packs

STRUCTURE AND GENERAL

- 1. Radome structure
- 2. Fuselage structure
- Avionics bay access panel
 Upward hinging GFRP-Nomex honeycomb sandwich radome
- sandwich radome
 5. Two fixed flight deck windshield
 6. Two fixed flight deck side windshield
 7. Overhead panel
 8. All metallic Al alloy fuselage
 9. Windshield mounting structure

- 10. Al alloy forward pressure bulkhead 11. Adjustable pilot seat 12. Galley

- 13. Passenger door with collapsible stairs
- Winglet (Retrofit)
 Cabin overhead lighting panel
- 16. Passenger cabin

- The Assenger seats
 Assle
 Metallic honeycomb sandwich panel floorboards

- Ning leading edge
 Sing sandwich panel noorboards
 Wing leading edge
 GFRP wing body fairing
 Wing front spar (Machined, Al alloy)
 Wing rear spar (Machined, Al alloy)
 Wing auxiliary spar main landing gear attachment (Machined, Al alloy)
 25. Sheet metal Al alloy ribs
 26. Integrally milled skin-Stringer Al alloy panels in
- between ribs

- between ribs
 27. wing trailing edge box
 28. Front spar-fuselage frame attachments
 29. Rear spar-fuselage frame attachments
 30. Auxiliary spar-fuselage frame attachments
 31. Lavatory
- 32. Cabin window

- 32. Cabin window
 33. Composite alloy rear pressure bulkhead
 34. Engine Pylon
 35. GFRP Dorsal Fin
 36. Tailcone
 37. Emergency exit door
 38. CFRP Vertical stabilizer (Composite)
 39. Fin to rear fuselage attachment
 40. CFRP Horizontal stabilizer (Composite)

A3

10

- 41. Baggage compartment 42. Baggage door 43. Glareshield

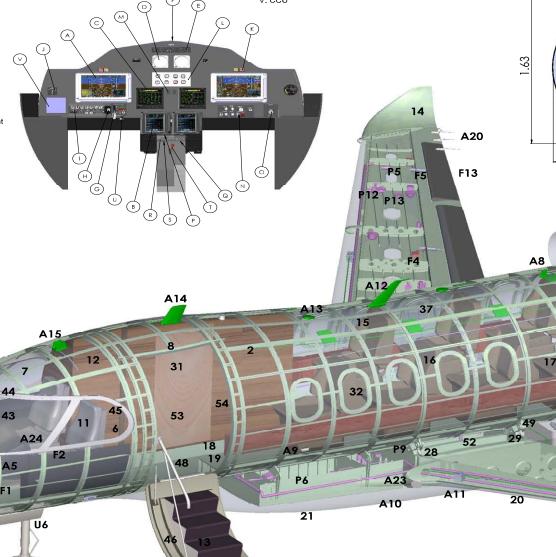
- 44. Cockpit windscreen/roof structure
 45. Direct vision window
 46. Door retraction mechanism
- 47. Door latches and guides
- 48. Dropped aisle

- 49. Fuselage mounted wing (Lug attachment) 50. Winglet attachment point 51. Trailing edge upper shroudes 52. Wing to fuselage center attachment fitting 53. Lavatory door

- 54. Basin and lavatory cabinet
- 55. Engine cowling
 56. Engine front beam (Carry through)
- 57. Engine rear beam (Carry through)

- **INSTRUMENT PANEL**
- A. MFD/PFD B. GTN
- C. Engine indicating system
 D. Stand by instrument
 E. AFCS panel
- E. AFCS panel
 F. Magnetic compass
 G. Landing gear control
 H. ELT switch
- I. Electrical panel
- J. Oxygen meter unit K. Master caution.
- L. Centre warning panel
- M. Engine fire warning N. ECS panel
- O. Oxygen control unit P. Engine start Q. Icing protection
- R. Fuel control panel
- S. Trim
 T. Alternate gear release







A16

F3

A6

E2

E1

3 0

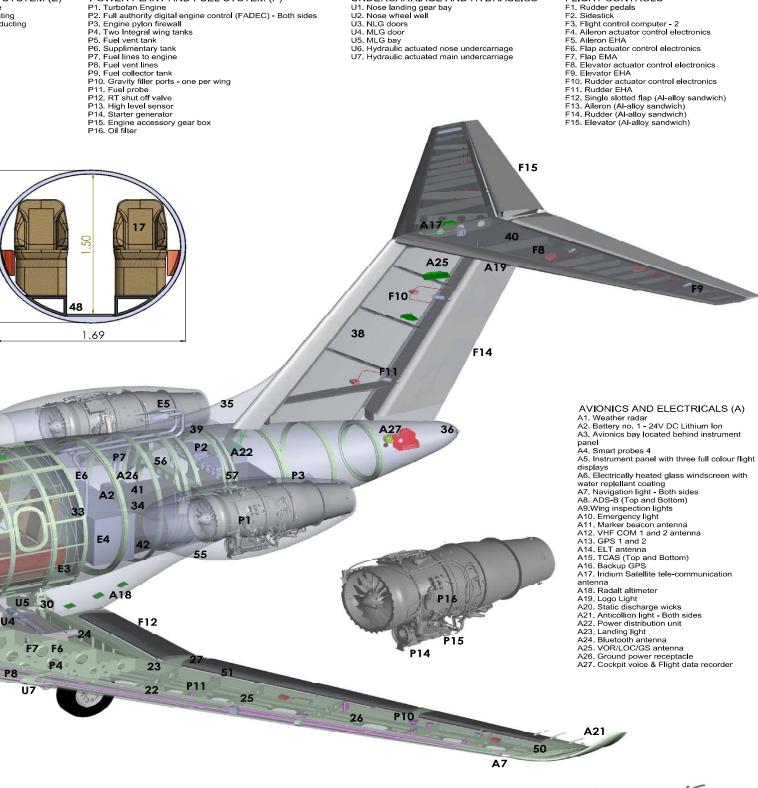
U1 U2

113

POWER PLANT AND FUEL SYSTEM (P)

FLIGHT CONTROLS

SYSTEM (E) ting ducting



UNDERCARRIAGE AND HYDRAULICS



promoting inclusion, collaboration, and sustainability.

- Aircraft & Systems Design: An ongoing aircraft design & integration programme (a contemporary 2+ 7 seat business jet RAJAS)
- Designing Wind Tunnel Models and Testing
- Aircraft and Systems Test Rig Design & Testing services
- Building of scaled or Full-Scale Mock-up of aircraft
- Sales, Support and Services for Aircraft Design and analysis products: Flight Stream, AAA, APP, FENSAP, Hi-Fun, FAR23 loads etc.
- Production Engineering & Tool Design Support
- Supply of quality assured Test Coupons and consumables for Special Processes.
- Aviation Services: Documents Engineering, Mods/STC implementation, sourcing of parts, Data Analysis
- Helping non-aerospace companies transition to aerospace: strategy and operational consulting

Can you share the details about military transport aircraft 'RAJAS-Rakshan'? What are the reasons to choose UP Defence Industrial Corridor?

RAJAS- Rakshan is the defence version of the base model RAJAS (GLJ-3X1).

From the experience gained and design progress of the basic version, a slightly stretched defence version – GLJ3X1-B (RAJAS- Rakshan) has been launched with longer range, higher altitude, faster speed.



It retains the basic salient features of RAJAS: signature shape, combined virtual and real window concept, PBW (Power by Wire), partial FBW (Fly by Wire), MEA (More Electric Aircraft) and high reliability through proven technologies (TRL7,8,9), innovatively implemented.

The roles of RAJAS-Rakshan include: Light Weight Special Cargo, Aerial Reconnaissance, Electronic Reconnaissance, Surveillance & Warfare, Maritime/Overland Surveillance & Search, Lead-in Trainer for Large Jet Transport Aircraft, Air Ambulance, Optionally Piloted Aircraft (OPA) Capability.

Some of the reasons to choose or shortlist UP Defence Industrial Corridor for the project are:

- UPDIC organisation approached Genser, explaining the subsidy schemes and advantages under UP Government's Defence and Aerospace Policy for Anchor D&A units
- Possibility of seed funding for this only one of its kind project in Asia and never before in India, which will enhance the prestige of India and the state.
- Proximity to HAL Transport Aircraft Division for their support in prototype development, integration, testing, certification of the aircraft.
- Possibility of land availability for the project on the opposite side of the

Chakeri Airport

■ Proximity of IIT Kanpur, its aerospace department and its research & test facilities.

We have also been in touch with Industry & Investment departments and Industrial Development Corporations of other states. Funding being crucial for this project, our choice for setting up major manufacturing facility will tilt towards State(s) from where we can get seed funding under PPP arrangements and minor MRO facilities shall be set up in other states. The facilities for manufacturing or for MRO must be adjacent to airstrips.

What are the specifications of the aircraft? Who will be the primary customers apart from Forces? When will you commence the complete the aircraft manufacturing?

It is a 2+7 seat, 5.5T AUW, twin turbofan 2250 NM range,0.79 Mach, 13000 m service ceiling.Power by Wire, partial Fly by Wire aircraft.

As the aircraft is primarily designed as a light business jet, the primary customers apart from Forces are business jet users: corporates, HNIs, Hospitality and travel organisations, Charter operators, Time share operators, air taxi, leasing companies and consolidators.

The complete aircraft manufacturing (Series Production) will commence

SPECIAL INTERVIEW--X



Full Scale Mock up Built at Jakkur Aerodrome Hangar, Bengaluru

only after prototype (3) /test aircraft (2) manufacturing, testing, certification, LSP (Limited Series Production) of 10 aircraft.

The entire cycle, which is funding dependant, will take about 39 months from the funding.

At present funding is being sought and funding models discussed with interested investors

When do you visualise to see first aircraft prototyping, testing & complete certification?



- Funding (F): Aircraft Level CDR
- (F + 6): All Key Systems CDR complete and go ahead for systems development/deliveries
- (F + 12): All Systems equipped and TRR (Test Readiness Review)
- (F + 14): Engine Arrival
- (F + 15): Aircraft Ground Tests commence
- (F + 18): Engine Ground Run Commence
- **(F + 24) :** Prototype 1 (PT1: Basic +PBW) Flight
- **(F + 27):** Prototype 2 (PT2: Basic+PBW+AFCS) Flight
- **(F + 30) :**Prototype 3 (PT3: Basic+PBW+FBW) Flight
- Type Cert(F+33): Dependent on airworthiness authorities; Satisfy all compliances by Sep 2025
- EIS (F+39): Work for earliest entry into service by 2026; but dependent

on T/C

PBW: Power by wire

AFCS: Automatic flight control system

FBW: Fly by wire

What will be the overall indigenous content of the aircraft?



About 60%, progressively growing to 75%.

Indigenous Content:

- Aircraft Structure fabrication.
- Aircraft Integration, testing, certification.
- Landing Gear, Electrical Systems, Flight Control Hardware & Software, and some of the HAL avionics like SSFDR and DME which are ITSOed.

Power Plant, Fuel Systems, Hydraulic Systems, Oxygen Systems, Ice Protection System, Fire Control System, Control Surface Actuators, ECS (Environmental Control Systems), Avionics Suite etc are sourced from overseas partners, which are planned to be co-produced indigenously, progressively.

Raw material in the form of Aluminium alloys and composite prepregs etc. are imported.

What are the future prospects of Genser?

Genser shall continue to operate and grow the current aerospace engineering services streams: Design-

Manufacturing-InService Support-Research & Analytics, for domestic and overseas customers.

As regards RAJAS project, Genser has incorporated an SPV (Special Purpose Vehicle) organisation: Angas

Aeronautics India Pvt Ltd. Genser is organising investment for RAJAS programme to be made into Angas. Once this happens, RAJAS IP shall be made available to Angas to carry on the business of aircraft integration, testing, certification manufacturing, selling, and supporting the aircraft. Genser shall retain share in ANGAS and may continue to provide need-based support to Angas for RAJAS project.

Having achieved the above, Genser may take up another indigenous aircraft/systems development programme.

Anything you would like to share with our Readers?

Genser with the help of passionate Indian aerospace experts has founded an organisation: MISSION Aerospace Foundation of India (MISSION AEROFI or just AEROFI). It is a not-for-profit organisation with the purpose to develop aerospace products from India for the world. Leading aerospace experts are its Advisory Board Members, Governing Board Members, Subject Matter Experts and Guides in all domains of aeronautics. AEROFI guides have been instrumental in providing knowledge and counselling to Genser engineering team to bring the RAJAS design/ development to stage it has come to. AEROFI membership is available to organisations, academic institutions, and individuals to contribute as well as avail guidance and support to develop Aerospace Products from India for the

Join us to invent and create together.

US Navy Awards Sikorsky Contract to Build 35 CH-53K Helicopters

he U.S. Navy awarded Sikorsky, a Lockheed Martin company a \$2.7 billion contract to build and deliver 35 additional CH-53K° helicopters - the largest procurement to date for this multi-mission aircraft.

"This contract award for 35 CH-53K helicopters stabilizes Sikorsky's nationwide supply base, creates additional production efficiencies, and provides the U.S. Marine Corps with transformative 21st century technologies," said Paul Lemmo, president of Sikorsky. "Our long-standing partnership led to this best value contract award providing the capability and readiness the Marines need."

The agreement includes 12 U.S. Marine Corps Lot 7 aircraft, 15 U.S. Marine Corps Lot 8 aircraft, and eight aircraft for Israel.

Sikorsky will begin delivering these aircraft in 2026.

This contract significantly advances Sikorsky and the U.S. Navy on the path toward a multi-year agreement and the 200 aircraft Marine Corps Program of Record.

Eight More CH-53K Special Ops Helicopters for Israeli Air Force

This contract award includes eight additional CH-53K helicopters for the Israeli Air Force and follows the initial production announcement in 2022 for the first four aircraft under a U.S. Navy Foreign Military Sales (FMS) agreement. The multi-mission CH-53K will support Israeli special operations programs, as well as provide the Israeli Defense Forces with a platform that has the speed, safety, survivability and gross weight capability to support all of its missions, including troop and cargo transport, and search and rescue.

Focus on Full Rate Production

The U.S Navy declared Full Rate Production for the CH-53K program in December 2022. This is expected to increase production to more than 20 helicopters annually in the coming years.



Sikorsky is procuring long-lead items and critical materials to support ramp up of CH-53K production in its digital factory.

"Our skilled employees are using digital tools to build more efficiently as these helicopters roll off the production line and into the hands of the Marines," said Dana Fiatarone, vice president, Sikorsky Marine Corps Systems. "The performance of the CH-53K in the fleet

validates its capabilities to provide a strategic advantage and shows that even more is possible with this aircraft."

The CH-53K operated by Marines in the fleet continue to achieve milestones.

U.S. Marines exceed 1,000 operational flight hours in the CH-53K.

CH-53K completed second successful sea trial.

U.S. Marines transferred supplies from KC-130 into a CH-53K.

RYANAIR EXPANDS IN AMMAN CONFIRMING LONG-TERM PARTNERSHIP WITH JORAMCO

panair has announced its expansion in Amman, confirming the 5-year heavy maintenance agreement with Joramco, the MRO provider based in Jordan and the engineering arm of Dubai Aerospace Enterprise (DAE). This agreement will further extend the partnership and will see the airline utilising up to 6 heavy maintenance lines at its facility in Amman-Jordan where Joramco is set to conduct 41 checks during this winter season.

This agreement ensures that the airline has continued flexibility as to where it places its aircraft for the upcoming maintenance season. The 110,000sq metre facility will facilitate the heavy maintenance of Ryanair's aircraft as the airline grows its fleet to 800 aircraft, incl. the recent 300 Boeing MAX-10 order, which will see the airline grow to carry over 300m passengers per year by 2034. These new, fuel-efficient, greener technology aircraft offer 21% more seats, burn 20% less fuel, and are 50% quieter than our B737-NGs.

Ryanair uses a mix of internal facilities and external suppliers to conduct its heavy maintenance. The airline group continues to invest in internal heavy maintenance facilities and this agreement will complement these facilities and ensure the maintenance requirements are more than met over the



coming years.

Speaking in Jordan, Ryanair's Chief Operations Officer, Neal McMahon, said: "We are thrilled to announce our expansion in Amman confirming our 5-year heavy maintenance agreement with Joramco. Joramco have been providing heavy maintenance for our fleet for the past 4 years however, this agreement allows Ryanair to utilise up to 6 heavy maintenance lines and conduct 41 checks this winter season.

Joramco is a long-established maintenance provider with state-of-the-art facilities with over 50 customers around the world. It has an excellent reputation for a quality service offering in the industry and we are pleased to be announcing this new and enhanced deal. This agreement will ensure that Ryanair continues to have flexibility as to where it places its aircraft for the winter maintenance season."

Commenting on this agreement Joramco's Chief Executive Officer, Fraser Currie, said, "Joramco is delighted to have been supporting Ryanair with base maintenance for the last 4 years. This agreement is a testament to the vision and dedication of the Ryanair heavy maintenance management team and the excellent services delivered by the entire team at Joramco. We look forward to growing and enhancing the relationship in Jordan and delivering amazing opportunities for both the local workforce in Jordan and Ryanair's customers".

AAR and Moog Inc. sign two multi-year commercial agreements

AR CORP a leading provider of aviation services to commercial and government operators, MROs, and OEMs, has signed two multi-year commercial agreements with Moog Inc. The agreements are the first steps in a new strategic relationship that allows for potential future expansion of the scope of services provided.

Under the first agreement, AAR will distribute Moog products applicable to mature aircraft platforms to customers globally. This new OEM relationship complements AAR's existing product offerings and customer base. Additionally, Moog will benefit from AAR's value added services, which include a



close-to-the-customer model that provides efficient delivery of inventory to the end customer, enabling Moog's effort for further simplification.

The second agreement will enable AAR and Moog to perform reciprocal component repair services. AAR's component repair facilities will receive support from Moog on manufactured piece parts and repair capability while Moog will receive components from AAR.

"We are delighted to sign this reciprocal

agreement with AAR for aftermarket repairs and distribution. We look forward to continuing to develop our relationship with AAR and build upon these agreements for the benefit of both parties," says Lisa Domanowski-de Jong, General Manager, Moog's Commercial Aftermarket business.

"The AAR-Moog agreements demonstrate a commitment to providing additional value to customers through improved product availability and outstanding customer service," says Frank Landrio, AAR's SVP of Distribution. "AAR looks forward to growing our relationship with Moog by successfully executing on these contracts for the benefit of our collective customers."

INVESTING IN THE FUTURE: OUR EDUCATIONAL EFFORTS IN INDIA



n paper alone, the scholarship candidate was strong. He had good grades and met the financial criteria. But when his evaluators found out about the data analysis project he launched on his own time, he was a lock.

"One recipient was already working on a project that would help farmers in the area by creating a financial predictor model that forecasts available land for farming in the following year," said Santosh Alaghari, a data science engineer at the India Engineering Center (IEC) who conducted several candidate interviews. "While he fit the requirements both academically and financially, it was this student's passion and work outside of the boundaries of traditional academics that really drew us to him."

The candidate was among 42 first-year engineering students from Sai Vidya Institute of Technology and Brindavan College of Engineering who received scholarships from Pratt & Whitney, an RTX business. Each scholarship covers one year of tuition and includes an informal employee mentoring program.

"Pratt & Whitney has always been committed to the society and actively supports students pursuing STEM programs. This initiative is just a step in the right

direction, and we hope a lot of students will get to benefit from this program in the future as well," said Venkata Subbaiah G, assistant manager, global supply management.

Thirty nine Pratt & Whitney employees across the Commercial Engines, India Engineering Center and India Capability Center in Delhi and Bengaluru, India participated in the process to interview and evaluate the scholarship candidates on several criteria, including not only their financial and academic backgrounds, but also their motivation for pursuing further education in engineering.

"This scholarship program gives Pratt & Whitney an opportunity to really contribute to society. All the recipients were so driven and passionate, so through this program hopefully they'll get to do everything that they want to do," said Mahaveer Padmarajaiah, Senior Manager, EPLM (Enterprise Product Lifecycle Management) India Operations and a candidate interviewer.

Further efforts in India

Pratt & Whitney is committing to the community in Bengaluru, and the scholarship program is only the beginning. Both Pratt & Whitney and Collins Aerospace -- a fellow business unit of RTX – continue to ramp up

corporate social responsibility (CSR) efforts in India to grow interest in STEM fields and ensure basic needs are met.

For example, Pratt & Whitney has been working with the India branch of Engineers without Borders (EWB). To date, Pratt & Whitney has supported the opening of 119 eLearning Centers that provide access to computers and STEM-based educational programming for students in underprivileged areas. The company also provided financial support to EWB to support Kasturba Gandhi Balika Vidyalaya (KGBV), a residential school for more than 230 girls, to ensure access to clean water.

At Collins Aerospace, CSR efforts in India have focused on initiatives in education, rural development, skill development and environmental conservation. By setting up 32 STEM laboratories, constructing two school buildings, and providing computer literacy and STEM skills training to economically disadvantaged community members, Collins Aerospace has transformed the lives of thousands of people in India.

"I feel super privileged to be a part of the community efforts here in India," said Trivedi. "We're investing not only in the future of the students, but the future of RTX as well."

AVICATION UPDATE



Cover Story ON CEO's Special Inside the Mind of CEOs.



Exclusive Interviews With Top Aviation Executive Driving Today's Aviation World.



Connect With us:
Advertisement & Editorial: +91 9444499221
kartikeya@futureaviation.in

SAFRAN BEGINS CONSTRUCTION OF NEW MARCHIN COMPRESSOR BLADE PLANT

n August 28, Safran Aero Boosters laid the first stone for the new Safran compressor blade plant for aircraft engines. Safran Blades is located on a former ArcelorMittal site, in the Province of Liège, Belgium using the expertise of ten economic players from Walloon.

The creation of Safran Blades was announced in December 2022 by François Lepot, CEO of Safran Aero Boosters. It represents an investment of €50 million (£43 million), in partnership with Belgian and Walloon federal authorities, Wallonie Entreprendre (WE) and the Belgian Federal Holding and Investment Company (S.F.P.I.M), both company shareholders (22%) alongside Safran Aero Boosters (56%).

Covering some 10,000 m², every day the centre of excellence will produce 2,000 blades; hundreds of the component are used in Safran Aero Boosters aircraft modules. As part of Safran's strategy of consolidating its autonomy and supply chain, the Factory 4.0 will have heavily digitised technical resources (automation, connected objects, automatic controls, artificial intelligence, cobotics, etc.). It will employ about one hundred people and is scheduled to become operational in 2025.



In the project, Safran Blades is working closely with two research centres: the CRM, which will be developing forge tool control skills, and Sirris, which will be developing its contactless real-time control skills. The teams will also be drawing on the expertise of five state-of-the-art companies, each specialised in a particular field. Each of these genuine partners will play a part in the design and construction of Safran Blades:

ID will be implementing a standard cell that can be adapted to all types of production, integrating very different areas of expertise (mechanical, automation, specific verifications).

Indutec will be developing a waterjet cutting

cell with characteristics similar to traditional digital controls in terms of precision, speed and control.

Smartyou will be deploying 'MES', a comprehensive and autonomous SME-oriented IT production management system which will act as the workshop coordinator.

Rovitech will be developing a tool for assisting automated decision-making and non-destructive quality control processes.

Finally, based on all of the collected information and with the help of Pepite, the teams will develop an artificial intelligence that will be able to anticipate non-quality production and adapt the tools in real time.

DHL Express to invest US\$192 million in aircraft maintenance facility at CVG Airport

HL Express has announced a significant investment of US\$192 million to construct an aircraft maintenance facility at Cincinnati/Northern Kentucky International Airport (CVG). The purpose of this facility is to support the growth of its expanding fleet at its primary U.S. air hub.

The Kentucky Economic Development Finance Authority has given its approval for US\$1 million in incentives for the 305,000-ft² maintenance facility. It will encompass dedicated space for aircraft parts storage, three maintenance parking gates and eight new aircraft gates.

The new maintenance centre will be situated adjacent to DHL's existing cargo operations on 50 additional acres leased from the airport. The facility will accommodate two Boeing 777 wide-



body freighters side by side. The company aims to complete the project by the end of 2025.

CVG Airport serves as the central connection point for DHL's express network to the rest of the world. With a fleet of 60 aircraft, DHL operates 130 daily flights. The facility is also crucial for partner airlines and joint venture Polar Air. Currently, the super-hub spans 194 acres, featuring 67 aircraft parking gates and 6.4 million-ft² of ramp area. Annually, it processes approximately 50 million international

shipments destined for the U.S., Canada, Mexico and Latin America.

In recent years, DHL has invested over US\$250 million in hub upgrades since 2015, focusing on aircraft handling equipment, autosort systems and renovated interior sections. The company also operates hubs in Germany and Hong Kong.

Currently, DHL Express conducts some of its repairs on the tarmac at CVG. However, larger tasks are outsourced to FEAM Aero, which is in the process of constructing a second maintenance hangar. This expansion initiative aims to provide sheltered line maintenance activities for DHL's fleet of Boeing 737, 767, and 777 aircraft. A combination of in-house and FEAM technicians will be responsible for maintaining the fleet.



Aviation Update Editor Kartikeya in conversation with

Capt. Sanjay Mandavia

MD & CEO-Flybig Airlines.

What do you see as the biggest challenges in North –East India? How do you propose to overcome them?

Operating to VFR airfields in North-East India presents challenges due to unpredictable weather, challenging terrain, limited airfield infrastructure, communication issues, air traffic density, regulatory complexities, limited support services, security concerns, and limited alternate airports.

DGCA India has stringent regulatory requirements that need to be complied with before operations can be commenced. We operationalised Tezu, Pasighat and Rupsi airfields (where terrain and weather are a constant challenge) for the first time after a long period of disuse, by carrying out careful pre-operational Inspections whereby applicable threats were documented for each airfield. Standard Operational Procedures were written by our Flight Operations and Flight Training personnel and submitted to DGCA for scrutiny for compliance with Regulatory standards. Our Flight Crew were selected on the basis of previous experience. and then trained, examined and certified for operations to these airfields. They are competent to handle any operational contingency that may arise.

At present we deal with the limited infrastructure available at these airfields by having in-house expertise in our network planning team and Operations Control Centre that has planned and implemented our network schedule in such a manner that maximum utilisation of aircraft takes place while working around the constraints of airport watch hours, sunset timings, heavy unpredictable thunderstorm activity and poor visibility. Our Standard Operational Procedures have fuel uplift criteria that address the issue of traffic congestion and limited alternate airfields by providing data driven standard fuel uplift for our flights at the planning stage itself.

Communication issues are handled by our IT team that ensures seamless connectivity of all departments at remote stations with our bases and headquarters through mobile wireless networks

Our security team works to ensure compliance with stringent BCAS guidelines that are designed to address aviation security concerns in the North East. The teams are trained and managed by personnel with decades of relevant airline experience. We have our own Aviation Security Institute for training our personnel.

We self-handle our ground support services which enables us to overcome any roadblocks that may arise from limited support services from other agencies. Regulatory complexities are addressed by having management personnel who have years of prior service with DGCA, BCAS etc.

How does the Twin Otter Series 400 aircraft fit for Flybig? How will the aircraft help to connect Tier 2 & 3 places?

The Twin Otter Series 400 requires approximately 1000 meters of runway for operations with max payload with full tanks. It is well-suited for flybig's operations to Tier 2 cities like Ludhiana (which is served with a runway length of 1430m) and Bhatinda (1820m). This compatibility allows Flybig to efficiently connect these airports with seats that affordably priced at INR 999. The aircraft's aerodynamic stability, achieved through high aspect ratio wings, a T-tail configuration, and twin-engine design, enables it to handle turbulence associated with stormy conditions during monsoons effectively. Additionally, its high-wing configuration

Additionally, its high-wing configuration and rugged landing gear also allows it to handle wet runways effectively. The high-wing design helps to prevent ingestion of water or debris into the engines during landing and takeoff. Additionally, its sturdy landing gear can withstand the impact and friction of landing on wet surfaces. These design elements ensure that the aircraft operates safely and reliably during monsoon conditions in India.

Q

What are your plans on sea plane



operations? Which cities you would like to start in initial phase?

We are still evaluating the performance characteristics of the seaplane option. Airport feasibility studies will be conducted after the aircraft evaluation

Is there sufficient airport infrastructure in Tier 2 & 3 Cities in India? Can you comment on the same for seaport infrastructure?

The airports in Tier 2 and 3 cities meet all the regulatory safety requirements for VFR operations. However, the lack of Instrument Landing Systems and night landing facilities leads to frequent schedule disruptions during monsoon and fog conditions. This means that for six months in a year, operations are continuously disrupted.

This leads to low schedule stability and is a cause for passenger complaints, lower load factors, and impacts the airline's bottom line negatively.

We have not completed the assessment for the seaport options yet.

What is more important to you – improving revenue or lowering costs?

Improving revenue enhances cash flow (and market presence), and lowering costs sustains profitable operations. Both are equally crucial for maximizing the airline's profitability and long-term success.

What is your mid -to long -term outlook for the Indian Market?

Passenger demand will continue to rise at 12-15% in the medium term, driven by a growing middle class, favorable demographics, rapid economic growth, and higher disposable incomes. The industry expects growth to happen between Tier 2 & Tier 3 cities. However, this growth is dependent on the availability of low-cost financing options for aircraft leasing, and the Government as well as private financial institutions are risk averse towards financing airlines. The market is there, but as local financing is not available, the sector will remain untapped until bigger foreign players take over the market. This has happened in the past with the Gulf market, to the detriment of Indian carriers. When this happens, the individual passengers will be happy, but the profits from the business and the benefits of new jobs and well-being of employment will be for the foreign nations.

What is it like to be the CEO of Flybig?

It is a 24x7 job. I am responsible for making major decisions, managing overall operations, setting personal and company's goals, and representing flybig to others. My role requires leadership, decision-making, and accountability for the company's success and performance. The DGCA has designated me as the Accountable Manager and the buck stops with me.



Bhumandal Se Brahmaand Tak

BE A PART OF THE INDO-FRENCH SPACE SUMMIT ON THE INAUGURAL DAY

French Delegation includes dignitaries from CNES (Space Agency of France), GIFAS (Space Association of France) private 25+ companies from France.







09-11 October 2023 Manekshaw Centre, New Delhi, India



Scan here for more info & registration





October 11th, 2023 **Shri Nitin Gadkari** Hon'ble Minister For **Road Transport &** Highway. Government of India



October 9th, 2023 **Dr Jitender Singh** Hon'ble Minister of State of the Space, Science and **Technology Prime** Minister's Office



October 9th, 2023 **Mme Sylvie Retailleau** Minister of Higher Education & Research, **Government of France**



October 9th, 2023 H.E. Mr Emmanuel Lenain Ambassador of France to India



October 9th, 2023 Shri S Somanath

Secretary, Department of Space and Chairman, Indian Space Research Organization (ISRO)



October 11th, 2023 **Dr Philippe Batiste** President, CNES (French Space Agency)



(IN-SPACe)



Special Invitee October 9th, 2023 **Astronaut Thomas** Pesquet European Space Agency

Join us to participate in an exhilarating and engaging 3-Day Conclave & Exhibition covering multi-sectoral usage & impact of Space Capabilities. **Target Audience**

- Ministry of Defence
- Indian Armed Forces Army, Navy, Air Force
- **Central Armed Police Forces and Paramilitary Forces**
- National Intelligence and Investigative Agencies
- Ministry of Ports, Shipping and Waterways
- **Ministry of Civil Aviation**
- **Ministry of Earth Sciences**
- Ministry of Electronics & Information Technology
- **Department of Science & Technology**
- **Ministry of Planning**
- **State Geospatial Bodies**
- **Legal and Policy Institutions**
- Survey of India
- User Segments: Healthcare, Logistics, Railways, Agriculture, Defence, Aviation & Maritime, etc.

- **Forest Survey of India**
- Military Survey, MoD
- **Defence Industry Corridors**
- **Deeptech and Space Startups**
- Incubators, Innovation Hubs, Centre(s) of Excellence
- **Angel Investors and Venture Capitalists, Investment Firms**
- **NDMA and NDRF**
- **NITI Aayog**
- **MSMEs**
- Satellite Components Equipments and Manufacturers
- Experts Remote Sensing, Image Processing, AI, Cartography, IoT
- Academic Institutions: IIT, IIITs, NITs, BITS, IISER's, Business & Management Schools, Law Colleges, and other Govt & Pvt Colleges, Universities

Supporting Partners































































BOEING, JORAMCO TO ESTABLISH BOEING FREIGHTER CONVERSION LINE IN JORDAN



Boeing and Joramco have announced an agreement to establish a new Boeing Converted Freighter (BCF) line in Amman, Jordan. Joramco will be the first MRO supplier in the Middle East supporting future Boeing freighter conversions of both domestic and foreign aircraft. Located in Amman, Jordan, Joramco is geographically situated to support future 737-800BCF customers operating across the Middle East, Europe, North Africa, and Commonwealth of Independent States (CIS).

"We're very excited to grow our relationship with Boeing. The new 737-800BCF capability we're bringing to our MRO is another major milestone for Joramco, and we are delighted Boeing has selected Joramco as a future site for the 737-800BCF, said Fraser Currie, Joramco CEO. "Our geographic location in Amman, our deep MRO experience, and the opportunity to work together with Dubai Aerospace Enterprise on their customers' requirements makes this a very exciting opportunity."

Joramco is a subsidiary of Dubai

Aerospace Enterprise, which also has a leasing division with a fleet of around 550 aircraft leased to approximately 120 airlines in more than 60 countries.

"We continue to look for opportunities to bring freighter conversion capacity closer to our customers" said Mike Doellefeld, Boeing Commercial Programs Vice President of Engineering Services, Converted Freighters and Sub-Components. "Connecting with Joramco reflects the potential of a growing region combined

with an MRO capable of producing the BCF with the quality our customers expect."

The global freighter fleet is expected to grow by 65% to more than 3,700 in 2042, according to Boeing's Commercial Market Outlook. This growth will require more than 2,800 production and converted freighter deliveries over the next two decades, including around 1,300 standard-body freighter conversions, such as the 737-800BCF.

Firoz Tarapore, CEO of DAE, added, "Today's announcement reaffirms our long-term commitment to our DAE Engineering division. Since acquiring Joramco in 2016, revenues have more than doubled, and we continue to expand our presence at our Amman, Jordan based facility, which is expected to reach 22 maintenance lines by the end of 2024. This latest agreement underpins our commitment, and we look forward to continuing to deepen our relationship with Boeing as well as developing new product offerings for Joramco's global customer base."

Satcom Direct installs Plane Simple® Ku-band terminal for first Latin American executive jet.

atcom Direct, the business aviation solutions provider, is attending LABACE riding high on the first installation of a Satcom Direct Plane Simple® Ku-band antenna on a Brazilian registered executive jet. The terminal was installed on a Gulfstream G550 in July this year. The aircraft is the first executive jet to optimize SD's advanced antenna technology in Latin America, and the operator has already confirmed it will be adding the system to the same undisclosed owner's Gulfstream G450 in Q1 of 2024. Three additional Brazil-registered Gulfstream G550s are scheduled to have the equipment installed before the end of 2023, and SD Brazil already has a backlog of orders for 2024.

Ewerton Libanio, Managing Director for SD Brazil, says, "SD is raising the connectivity bar with this new purpose-built class of antenna for the business aviation sector. Our clients in this region have been eagerly waiting for a simplified, high-speed data solution, and we are already delighted to hold orders for next year. More importantly, we are giving customers greater flexibility, cost-effective connectivity options, and a single resource to fulfill every connectivity



need for those flying within Latin America and around the globe."

The installation gives the Gulfstream operator access to the power, versatility, and convenient management of the SD Plane Simple advanced antenna technology. The owners fly for business and leisure and use the connectivity to stay productive and entertained. Connected with the Intelsat FlexExec high throughput satellite network, the only dedicated business aviation airtime in the sector, the passenger experience will be enhanced by the consistently reliable connectivity.

The simplified antenna installation requires fitting just two-line replaceable units, the tail-mounted antenna and the SD modem unit, which simplifies upgrade pathways, reduces aircraft downtime and optimizes maintenance budgets. Available now, the

installation makes the complete SD ecosystem of hardware, software, ground infrastructure, cybersecurity, and award-winning customer support immediately available to corporate, private and government owners, as well as supporting special mission airframes.

Brazils Agência Nacional de Aviação Civil, ANAC, has released an STC for the Plane Simple Ku-band terminal for the Gulfstream G550 installation as well as for Gulfstream GIV, GIV-X, G450, GV, GV-SP, types. In addition, Dassault owners benefit from the STC awarded by the ANAC for Dassault F2000LX/LXS, F900EX/LX, and Falcon 7X models.

The executive jet installation follows the equipping of a Brazilian-registered Embraer EMB-110 for operator Fototerra, which uses the technology to transmit coastal images in real-time directly to its customers.

Nomad Aviation strengthened business jet fleet with a Dassault Falcon 7X and will soon be welcoming its first Gulfstream G650ER

omad Aviation, a leading provider of integrated private aviation solutions including Aircraft Management, Aircraft Charter and CAMO Services, continues to grow its fleet of aircraft. A Europe based and privately operated Dassault Falcon 7X has joined the fleet in early June and a factory new Gulfstream G650ER is to follow suit in Q3 2023.

During the course of the year, Nomad Aviation's global fleet of managed aircraft will grow to a total of 10 aircraft. The exclusive charter fleet consists of a Gulfstream G450, a Bombardier Global 5000 and an Airbus ACJ319.

Thomas Köhli, CEO of Nomad Aviation said: "Our managed and charter fleet has grown significantly throughout the past 12 months and we are pleased to welcome these two state of the art aircraft to our fleet. We take great



pride in the reputation we have earned as one of Switzerland's leading Aircraft Management and Charter brands.

"We are very happy with the steady growth of our fleet of managed aircraft. Our customers

appreciate our comprehensive aviation solutions, knowing they can rely on us and receive individual attention at any given time," added Christoph Thurnherr, Nomad Aviation's Vice President Aircraft Management & Sales.

DC Aviation Al-Futtaim completes its first 60-month check on Bombardier Global 6000 aircraft

C Aviation Al-Futtaim, a leading business aviation services provider, has successfully completed its first 60 months maintenance check on a Bombardier Global 6000 aircraft. The aircraft which is owned by a private customer underwent its first heavy maintenance check at DCAF's hangar at Al Maktoum International Airport. The maintenance inspection was the largest undertaken by the DCAF team, involving over 2,000 man-hours and adept management of several logistical challenges with the support of local and overseas partners.

In addition to the comprehensive inspection, the DCAF team provided invaluable support for various line maintenance activities, including Wheel Shop and Battery Shop requests, during the project.

Chris Rosewarne, Maintenance Manager at DCAF said: "This is an important



milestone which marks the first time DCAF's highly trained technicians have performed a 60-month check on a Global 6000 aircraft. The successful completion of this complex inspection further highlights the investments we have made in expanding our capabilities, which have allowed us to provide our customers with reliable and cost-effective maintenance services. We are delighted to offer this high level of expertise and comprehensive support, including battery and wheel shop capabilities, for Global and Challenger aircraft at DWC."

DCAF is an EASA and GCAA Part-

145 certified maintenance operation with qualified engineers and technicians providing both line and base maintenance services for various types of aircraft. DCAF's maintenance teams can cater to various business jets, including the Airbus 320 family, Bombardier Global, Bombardier Challenger 604/605/650, Dassault Falcon 7X/900. Owners and aircraft operators can receive a diverse range of maintenance services, from spare parts supply, procurement and storage to maintenance and airworthiness certification.

Textron Aviation Secures ANAC Certification for Cessna SkyCourier, Paving the Way for Sales in Brazil

extron Aviation announced the Cessna SkyCourier twin utility turboprop has been awarded type certification by the National Civil Aviation Authority of Brazil (ANAC), paving the way for the aircraft to serve the dynamic and expansive Brazilian market and cater to its diverse aviation needs.

"The Cessna SkyCourier's high payload capacity, short takeoff and landing capability, and cost-efficiency make it a great choice for operators in Brazil," said Lannie O'Bannion, senior vice president, Global Sales and Flight Operations. "The aircraft's versatility and performance equip customers in the region with smart solutions for their unique missions and circumstances."

The aircraft offers an unparalleled combination of performance, capacity and capability, positioning it as a catalyst for enhanced regional connectivity, efficient cargo



transportation, and reliable regional passenger operations. The SkyCourier is an ideal fit for Brazil's diverse geography, remote locations and growing demand for air transportation.

The SkyCourier's adaptability allows for seamless transitions between different mission profiles, including passenger transport, cargo delivery and special missions operations.

With its short takeoff and landing capability, the aircraft can operate from smaller runways, reaching remote communities and serving locations with limited infrastructure. Additionally, the recently certified gravel kit option further expands the SkyCourier's capability to operate from unimproved runways.

Sino Jet Procures 100 AEROFUGIA Manned eVTOL Aircraft to Revolutionize Business Aviation

Ino Jet has inked a monumental procurement agreement with AEROFUGIA, a subsidiary of Geely Group, for the acquisition of 100 state-of-the-art eVTOL aircraft. This strategic milestone aims to forge a pioneering urban mobility ecosystem. Simultaneously, Sino Jet and AEROFUGIA have solidified their partnership through an exclusive strategic cooperation agreement. Both entities are set to collaboratively shape the ongoing airworthiness standards for eVTOLs, providing a comprehensive solution for low-altitude, three-dimensional commercial operations.

The agility, convenience, and privacy inherent in business jets make them the preferred mode of transportation for timeconscious business executives. Today's business aviation landscape predominantly comprises jet-propelled aircraft, which require designated runways for flights between airports. In contrast, eVTOLs represent an innovative generation of aviation technology marked by safety, reliability, environmental consciousness, and economic efficiency. With minimal takeoff and landing area requirements, zero carbon emissions, stellar performance, and enhanced safety measures, eVTOLs align with environmental and sustainable development principles. Leveraging these strengths, eVTOLs seamlessly complement business jets, elevating the quality of endto-end travel experiences and further enhancing time efficiency.

Mr. Li Yuanfeng, President of Sino Jet, underscores the potential of eVTOLs



in shaping a green, sustainable, and three-dimensional aviation ecosystem. AEROFUGIA, a leading Chinese eVTOL developer and manufacturer under Geely Technology Group, has engineered the AE200 to address market demands with advanced technological achievements, aligning harmoniously with Sino Jet's commitment to "green development". Sino Jet is primed to forge ahead with business expansion, leveraging the unique strengths of eVTOLs to unlock broader development prospects within the business aviation sector.

Dr. Guo Liang, CEO and Chief Scientist of AEROFUGIA, asserts AEROFUGIA's dedication to creating more efficient business travel experiences with eVTOL characterized by exceptional safety, performance, and comfort. Anticipating future collaboration with Sino Jet, AEROFUGIA seeks to synergize industry resources, facilitating the real-world application of eVTOLs in a range of commercial scenarios.

Ms. Gu Wenting, Vice President of Geely Technology Group, notes that AEROFUGIA serves as Geely Technology Group's platform for low-altitude travel services. Geely Technology Group will continue providing robust support to AEROFUGIA, fostering an open approach that embraces additional collaborative partners. This collective effort aims to accelerate the rapid development of the low-altitude travel industry.

Following the signing of the strategic agreement, Sino Jet will leverage its extensive experience in aircraft operations, deploying a highly digitized aircraft lifecycle management system and a skilled professional team to facilitate the establishment of continuous airworthiness standards and compliance methods for eVTOLs. This concerted effort will expedite the swift commercial operation of eVTOLs, cultivating a smart, efficient, safe, reliable, and sustainable intelligent aerial transportation ecosystem.



Gulfstream G550 completes 1 millionth flight

ulfstream Aerospace has announced the G550 fleet recently completed its 1 millionth landing, proving the long-lasting durability of the aircraft and its continued performance excellence. To date, the G550 fleet has logged 2.6 million flight hours.

"Two decades after the aircraft entered service, the G550 continues to achieve inservice milestones and add to its impressive list of accolades as evidenced by this 1 millionth landing," said Mark Burns, president, Gulfstream.

"This is a testament to the quality of the G550 and the technology that Gulfstream introduced on this aircraft, which paved the way for our next-generation fleet. The G550 is also backed by Gulfstream's Customer Support worldwide network, which helps ensure continued service achievements like this one."

The G550 pioneered Gulfstream's Enhanced Vision System, now known as Enhanced Flight Vision System (EFVS), and was recognized for this achievement and



other advances with the National Aeronautic Association's 2003 Collier Trophy. Introduced on the G550, EFVS now is available for the G280, G650, G650ER, G400, G500 and G600. The all-new G700 and G800 feature EFVS and Synthetic Vision System on Gulfstream's new Combined Vision System to further enhance pilot situational awareness. Gulfstream was also the first original equipment manufacturer to gain Federal Aviation Administration approval for certified operators to use EFVS for touchdown and rollout.

Equipped with two Rolls-Royce BR710

engines, the G550 can fly 6,750 nautical miles/12,501 kilometers at Mach 0.80, putting the aircraft at the top of its class. The cabin offers multiple configurations, can seat up to 19 passengers and sleep up to 8.

Thanks to this class-leading performance and reliability, the G550 has been a key platform for special missions, with modifications for a variety of government applications including aeromedical evacuation, head-of-state transport, airborne early warning, atmospheric research and maritime patrol.

Dassault Aviation: Falcon 6X Receives EASA and FAA Certification

Recently, the European Aviation Safety Agency (EASA) issued the type certificate for Dassault's Falcon 6X, followed by the U.S. Federal Aviation Administration (FAA).

These certifications conclude a more than two-year-long test campaign during which 1,500 flight hours were logged worldwide. It is a significant step on the path to entry into service for the Falcon 6X, with the first units undergoing final completion.

"The certification of the Falcon 6X is a remarkable milestone for Dassault Aviation. We would like to recognize the EASA and FAA certification teams for their commitment in this demanding process and our customers for their confidence. The Falcon 6X is the first brand new business jet to comply with the latest regulations, which will enhance the safety and security of all new aircraft," said Eric Trappier, Chairman



and CEO of Dassault Aviation. "The 5,500 nm / 10,200 km Falcon 6X combines the best qualities of Dassault Aviation's world-leading business and fighter aircraft expertise to create the longest-range jet in its class with unparalleled passenger comfort and maximum mission flexibility".

The Falcon 6X is the most spacious, advanced and versatile twinjet in the long-range business jet segment. It has been recognized with various design awards, including the Red Dot Award and the International Yacht & Aviation Award.











Asia's largest event on Civil Aviation (Commercial, General and Business Aviation)





Hyderabad, India.

18th - 21st January 2024 Begumpet Airport, Hyderabad, India

In pursuance of the Hon'ble Prime Minister's vision to fulfil the common man's aspirations of flying and the grand success of the previous edition, Ministry of Civil Aviation (MoCA), Government of India, Airport Authority of India (AAI) and Federation of Indian Chambers of Commerce and Industry (FICCI) are organizing the next edition of 'WINGS INDIA 2024', a flagship event on Civil Aviation sector in this part of the world. The event is scheduled from 18th to 21st, January 2024, at Begumpet Airport,

Wings India 2024 will be the most comprehensive event on the Civil Aviation Industry calendar that includes the Inaugural Ceremony, Global Ministerial Conference, Global CEOs' Forum, B2B / B2G Meetings and Awards Ceremony, Cultural Evening & Business Networking Dinner. Also, the event includes Exhibition, Chalets, Demonstration flights, Static Display, Media Conferences, One-to-One Business Meetings and many more.

Event Format 🗩 **EXHIBITION**

CONFERENCE

CHALETS

CEOs FORUM

STATIC DISPLAY

MEDIA CONFERENCES

12

AWARDS

Î



HELICOPTER MANUFACTURERS **INTERIORS**

AIRCRAFT MACHINERY & EQUIPMENT COMPANIES

AIRLINES, AIRLINE SERVICES & CARGO

MRO

SPACE & DRONES **I**NDUSTRY

AIRPORT INFRASTRUCTURE AIRCRAFT ENGINE **MANUFACTURERS**

SKILL **DEVELOPMENT**

Etihad Cargo adds capacity for Europe, Asia

tihad Cargo will boost its belly capacity with its winter schedule by introducing 29 weekly passenger flights to new destinations, and adding 90 flights to existing routes, said the Abu Dhabibased airline. It will offer additional cargo capacity to two new European gateways with four flights a week to Copenhagen in Denmark and three to Düsseldorf in Germany. Together with three additional flights to Munich, this brings Etihad's total number of services to Germany to 28 per week, including four freighter services to Frankfurt.

Meanwhile, the three weekly passenger flights to Lisbon introduced for the summer will be extended to the winter schedule. There are also four additional flights to Rome, bringing the total number to 11 per week and three to Madrid and Milan, bringing the total number of weekly flights to each destination to ten.

In Asia, it will operate five passenger flights per week to Osaka, its second Japanese gateway. It will add three more flights per week to Beijing and four to Shanghai. Etihad Cargo recently announced a new freighter



service to Ezhou Huahu Airport, making it the first international carrier to operate to the new Chinese cargo-orientated airport.

Bellyhold capacity will also be available on new passenger routes to Kozhikode and Thiruvananthapuram in India, seven flights per week to each destination. Seven new passenger flights to Chennai will bring the total number of weekly flights to 21, supported by a twice-weekly freighter service. There will also be eight additional flights to Kochi, two new flights to Islamabad, seven

more to the Maldives, five additional flights to Cairo and seven to Phuket per week, along with seven direct flights to Colombo.

Chief operating officer, Mohammad Al Bulooki, said: "The airline's growing passenger network, combined with Etihad Cargo's scheduled and charter freighter services, will boost cargo capacity across Europe, Asia and North America, strengthening the links between Abu Dhabi and key global markets and ensuring Etihad Cargo can meet increased demand for cargo capacity."

dnata cuts CO2 emissions by 80 tonnes per year with Biofuel switch in UAE

nata, a leading global air and travel services provider, continues to take initiatives to reduce its environmental footprint across its operations in the UAE. Most recently, dnata's group brands dnata Logistics, Arabian Adventures, Alpha Flight Services and City Sightseeing have switched their vehicles to run on a biofuel blend. The strategic move saves 80 tonnes of Carbon Dioxide (CO2) emissions per year, equivalent to over 320,000 kilometres driven by an average petrol-powered car.

dnata's latest initiative is part of its efforts to reduce its carbon footprint and waste to landfill by 20% by 2024 in line with its two-year green operations strategy. In June 2022, dnata announced that it would invest US\$100 million in green operations in two years to further enhance its environmental efficiency



globally.

"We constantly explore and implement emission reduction methods across our fleet and infrastructure to reduce our carbon footprint. The introduction of biofuel to a diverse range of our UAE businesses is an important step in our ongoing journey. It offers a simple and effective method of cutting emissions throughout the fuel lifecycle, without requiring any changes to equipment. We will continue to invest in our operations, including large-scale infrastructure solutions, to further enhance our sustainability performance and achieve our green operations targets." Steve Allen, CEO of dnata Group

dnata to deliver AI-powered solutions to drive innovative cargo services in Singapore



has partnered logistics technology solutions provider Speedcargo to deliver cutting-edge cargo services to Etihad Cargo at Singapore Changi Airport (SIN). Speedcargo's artificial intelligence (AI)based Cargo Eye and Assemble solutions installed at dnata's facilities will help overall logistical efficiency, digitisation and optimise cargo capacity for Etihad Cargo's daily flights departing from Singapore. The roll-out of Cargo Eye and Assemble follows the airline's decision to implement the technology in response to successful trials.

Cargo Eye uses advanced, vision-based 3D technology to scan and capture a cargo's exact dimensions, volume data, images, and labels, providing a comprehensive digital record. This information is then fed into Assemble which creates a digital plan, advising dnata's highly-trained cargo handling teams of the optimal method of building a pallet. The innovative solutions ensure Etihad Cargo maximises cargo capacity, while becoming more efficient and sustainable.

Both Cargo Eye and Assemble seamlessly integrate into dnata's existing warehouse management system.

Charles Galloway, dnata's Regional CEO, Airport Operations – Asia Pacific, said: "dnata is proud to lead the digitisation of cargo processes through innovative technology solutions. Working alongside Speedcargo, Cargo Eye and Assemble will enable us to provide Etihad Cargo and its customers with digital audit trails of how their cargo has been handled, improving efficiency and providing a quality end-to-end service. We will continue to create value and enhance our service offerings through digitalisation."

Dr Krishna Kumar Nallur, Speedcargo's CEO, commented: "This first step towards industry transformation will enable end-to-end optimization of cargo capacity, from booking to cargo hold. Our AI-powered solutions will help Etihad Cargo to maximize capacity across their fleet, and enable dnata Singapore to digitise their cargo handling, thereby improving their productivity and efficiency in operations."

Thomas Schürmann, Head of Cargo

Operations & Delivery at Etihad Cargo, said: "With the launch of Speedcargo Technologies' AI-powered solutions, Etihad Cargo is transforming airfreight operations and optimising cargo capacity as the latest step in the carrier's digitalisation journey. Singapore was selected as the first station to go live with these state-of-the-art AI tools, which will boost efficiency, digitise and standardise cargo handling across Etihad Cargo's network and enhance service levels for the carrier's customers and partners. Following successful trials of the AI-powered cargo handling solutions, Etihad Cargo sought out a ground handling partner to deploy Cargo Eye and Assemble, and dnata was a clear choice, being fully aligned with Etihad Cargo's commitment to utilising cargo-maximising technology to enhance air cargo operations."

dnata's Singapore facilities are the first in its expansive global network to implement Cargo Eye and Assemble technology. Speedcargo is working with dnata to roll out the service at further global stations.

Swissport successfully completes acquisition of majority stake in Flughafen Düsseldorf Cargo GmbH



S wissport Deutschland GmbH and Flughafen Düsseldorf GmbH have successfully closed the transaction for their cargo joint venture at Düsseldorf Airport. The new joint venture, named Swissport DUS Cargo Services GmbH, started operations on 17 August 2023.

Following the signing of binding agreements earlier in the year, Swissport has successfully closed the acquisition of a 74.9 percent stake in Flughafen Düsseldorf Cargo GmbH, the cargo handling unit of Düsseldorf Airport. Starting 17 August 2023, the two partners Swissport Deutschland GmbH and Flughafen Düsseldorf GmbH have embarked on a long-term partnership at Düsseldorf Airport, operating under the new name of Swissport DUS Cargo Services GmbH.

"To complement its strong organic growth, Swissport is pursuing an ambitious M&A agenda that includes being an active consolidator in the aviation services industry as well as entering into partnerships and joint ventures globally," says Pablo von Siebenthal, Swissport's Global Head of Mergers & Acquisitions. "In our conversations with airports and airlines around the world we see great interest from them in either selling or partnering with us for their own ground or cargo handling operations. They realize that as the leading aviation services company in the world, Swissport is their best partner."

The Düsseldorf joint venture aligns with Swissport's global M&A plan, aimed at reinforcing its global presence across several business lines and its role as the industry leader. With the three largest global players sharing less than 40 percent of the global market, interesting potential for further consolidation remains. Swissport has been driving consolidation since its foundation in 1996 and continues to shape the industry, exemplified by traditional take-overs like Aerocare with operations at 35 airports in Australia and in New Zealand in 2018 and the recent strategic acquisition of Alitalia's ground handling unit at Rome-Fiumicino Airport in Italy in 2022.

"The start of our joint operations in Düsseldorf is a moment of joy for Swissport Germany," says Bruno Stefani, Swissport's CEO for Germany, Switzerland, Austria and Italy. "It shows our commitment to the German market and solidifies our position in Düsseldorf and across Germany and sets the stage of further growth. Across Germany, Swissport supports airlines from all over the world with a wide range of services including ground services, cargo handling and aviation fueling."

Cathay Cargo receives IATA's CEIV Lithium Batteries accreditation in the air and on the ground

athay Cargo and the Cathay Cargo Terminal have received the IATA Center of Excellence for Independent Validators Lithium Batteries (CEIV Li-batt) certification. With this new accreditation, both Cathay Cargo and the Cathay Cargo Terminal each now hold the full set of CEIV certifications, joining CEIV Pharma, CEIV Fresh and CEIV Live Animals. CEIV Li-batt addresses an important issue for the air-cargo industry. The incorrect charging, handling and mislabelling of shipments containing lithium-ion batteries can endanger people and property, and has caused fires. This has become a bigger issue for the aircargo industry as e-commerce continues to grow, increasing the incidence of undeclared or misdeclared shipments.

The airline-specific CEIV Li-batt accreditation joins Cathay Cargo's existing mitigations for lithium-ion battery shipments, which include a full range of fire containment bags (FCBs) and fire-resistant containers (FRCs). Cathay Cargo also operates its Cargo Agent Operation Programme and an additional indemnity scheme for mislabelled dangerous goods as the supply chain becomes more complex.

The Cathay Cargo Terminal at Hong Kong International Airport has also independently achieved its own CEIV Li-batt accreditation for cargo terminal operators, ensuring customers' shipments receive a safe and assured end-to-end experience, whether travelling to, from or through Hong Kong.

Director Cargo Tom Owen said: "The safe carriage of lithium-ion batteries is a core focus of our cargo business and we have introduced a coherent and farreaching series of safety protocols with our customers and operational teams to mitigate risks over the past few years. The CEIV Li-batt accreditation now achieved by both Cathay Cargo and the Cathay Cargo Terminal will give further confidence to our customers that we adhere to the highest standards of



handling in the industry."

CEIV Li-batt formalises baseline standards to improve the competency and quality management in the handling and carriage of lithium-ion batteries across the logistics supply chain. The accreditation is also available to shippers, forwarders and cargo terminal operators. The entire programme is underpinned by the IATA Dangerous Goods Regulations (DGR) and the IATA Lithium Battery Shipping Regulations (LBSR), and adds training, assessment and validation that demonstrate compliance with these regulations.

IATA Regional Vice President for North Asia Dr Xie Xingquan said: "The air cargo market for products containing lithium-ion batteries is experiencing significant growth. We congratulate Cathay Cargo and its cargo terminal operator, Cathay Cargo Terminal, on successfully achieving IATA's CEIV Lithium Batteries Certification. This accomplishment by one of the world's largest cargo operators and its partner, located in one of the busiest logistics hubs globally, is a significant boost for the aviation industry. Furthermore, it assures the customers of these organisations that they are adhering to the highest safety and security standards when transporting products containing lithium-ion batteries."

Cathay Cargo's Owen added: "We will continue to innovate and optimise our processes around safe lithium-ion battery carriage. The work we are doing related to this will remain as the upmost priority for our operational teams."

DHL Global Forwarding makes 3 leadership appointments in Asia Pacific



HL Global Forwarding, the freight specialist arm of DHL Group, has announced three strategic leadership appointments in Asia Pacific with the upcoming retirement of Kelvin Leung and Charles Kauffman.

Karsten Michaelis, previously SVP Ocean Freight DHL Global Forwarding Asia Pacific, was appointed as president/ representative director of DHL Global Forwarding Japan, effective July 1, taking over the position of Kauffman. Edwin Pinto, currently head of marketing and sales at DHL Global Forwarding, Thailand and Indochina, was appointed as managing director of DHL Global Forwarding India, effective September 1, following Niki Frank's promotion. Praveen Gregory, currently VP of Order Management Solutions Asia Pacific at DHL Global Forwarding, will assume the position of SVP Ocean Freight DHL Global Forwarding Asia Pacific, effective September 1 this year.

"With Kelvin and Charles retiring this year, it has opened up a few key positions that we had to fill, and I am glad that we

could do so with candidates from the network. This goes to show that we can nurture and retain talent while providing the right opportunities for growth to our employees," said Niki Frank, CEO of DHL Global Forwarding, Asia Pacific.

"All of them bring the right experience and the required expertise and will provide a fresh perspective to these roles.

Kaufmann, CEO of DHL Global Forwarding North Asia South Pacific (NASP), will step down from his role after more than five decades of valued service to the Group. He will hand over the country's responsibility for Japan to Michaelis while continuing to look after the cluster until the end of the year.

DHL said Michaelis has had an extensive career spanning over two decades in the logistics sector, he has been based primarily in the Asia Pacific



region, in locations such as Hong Kong, Bangladesh, Australia and Singapore. Since joining the group in 2011, he took on several managerial roles for Ocean Freight in Asia Pacific, including his most recent position as SVP, Ocean Freight DHL Global Forwarding Asia Pacific, in 2017.

Pinto, who is taking over Frank's position, joined DHL in 2001 in India and has since worked in several management roles across DHL Global Forwarding. He took his latest role at DHL in 2021.

Meanwhile, Gregory — who will assume the position of SVP Ocean Freight, DHL Global Forwarding, and Asia Pacific— worked for Maersk prior to joining DHL Group in Dubai Ocean Freight Operations in 2008.

In 2010, he relocated to Germany and held several roles in Market Intelligence & Strategy and Product Development. He moved to Hong Kong in 2018 to take on regional management roles at Ocean Commercial Center and Account Management ISC. In 2022, he assumed his current position as VP of Order Management Solutions Asia Pacific.

ANANTH TECHNOLOGIES PVT LTD



An AS-9100D & ISO 9001:2015 certified company Committed Partner for Indian Aerospace & Defence Programs

Facilities

- Complete satellite manufacturing facilities under one roof
- Launch Vehicles Facilities
- Design and Manufacture of Space and Defence Equipment
- Contributed to 91 Satellites and
- 71 Launch vehicles so far
- In-house environmental test facilities
- Class 100K, 10 clean rooms with SMT Production lines

Products

- Assembly, Integration & Testing (AIT) of Satellites for LEO and for GEO orbits
- Digital & Embedded systems
- EW systems & Simulators
- Laser & Optical Systems
- Sights for weapons
- AIT of Launch Vehicles
- Telemetry & Tracking systems
- On-board computing systems
- Sensor Systems
- Navigation & Controls systems
- RF and Microwave systems

Meeting Quality & Reliability Standards for Space & Defence programs
Dr. SUBBA RAO PAVULURI, CHAIRMAN & MANAGING DIRECTOR,
E-mail: subbarao@ananthtech.com

Headquarters

ANANTH TECHNOLOGIES PVT LTD.

Ananth Info Park, Plot No.39, Phase-II Madhapur

Hyderabad - 500 081

Tel:+91-40-6615 6615

Fax:+91-40-6615 6531

E-mail: subbarao@ananthtech.com

mail@ananthtech.com

Satellite Facilities

ANANTH TECHNOLOGIES PVT LTD.

No:64, KIADB Bangalore Aerospace Park, Singahalli Village, Budigere Post, Bangalore North Taluk

Bangalore - 562129

Tel:+91-80-6616 6616

E-mail: mail@ananthtech.com

Launch Vehicles Facilities

ANANTH TECHNOLOGIES PVT LTD. Plot No.51(b) KINFRA Park,
Menamkulam Sub-Dist: Kazhakuttom Thiruvananthapuram, Kerala
Tel:+91-471-2315913 E-mail: mail@ananthtech.com



AERONAUTICAL ENGINEERING & RESEARCH ORGANISATION

AERO-CET 2024



Career in Aviation and Space Engineering

Postgraduate Program

M.Tech in Aerospace Engineering

Duration: 2 years



Undergraduate Courses

B.Tech Aerospace Engineering B.Tech Aeronautical Engineering B.Tech Avionics Engineering

Duration: 4 years

Dual Degree Program

B.Tech + M.Tech Aerospace Engineering

Duration: 5 years





Dual Program

Aircraft Maintenance Engineering with Degree in Aeronautics

Duration: 3 years

Diploma Program in Aviation

Air Hostess/ Cabin Crew Training Aviation Management Air Fares & **Ticketing Management Airport Ground Staff Training**

Duration: 12 month



REGISTRATION STARTING FROM SEPTEMBER

Advance Certification Course In Aviation Management

Duration: 6 month



2023



RNI No.: TNENG/2014/59266

Postal Regn No: TN / CH(C) / 505 / 15-17, Publication Date: 1st of Every Month.

Postal Permission Date: 5th or 7th of Every Month



