



INDIGO STARTS DIRECT FLIGHTS FROM SHILLONG TO DIBRUGARH UNDER RCS SCHEME



SPICEJET LAUNCHES ITS NEW WEBSITE AIMED AT PROVIDING AN ENHANCED CUSTOMER EXPERIENCE

AVIATION

India's premier aviation monthly magazine

Vol 08 | Issue 3 | November 2021 | ₹ 150
www.aviationupdatemagazine.com

UPDATE



EXPO 20
OFFICIAL PREMIER P

**THE WORLD'S MOST EXCITING
DUBAI AIRSHOW 2021 IS ON THE GO!**



2nd - 4th December 2021 India Expo Centre, Greater Noida



ORGANISED BY

CO-LOCATED EVENTS



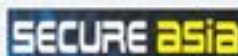
8800490372

psrivastava@servintonline.com

9711361842

nlaroia@servintonline.com

MEDIA PARTNERS



info@droneexpo.in



Website

www.droneexpo.in



29

Design and Technology Unite in the New Cessna Citation M2 Gen2 and Citation XLS Gen2 Business Jets

05 Vistara and Lufthansa enter frequent flyer partnership

08 Global Medical Response orders 21 new Airbus helicopters

12 Grazia Vittadini joins Rolls-Royce as Chief Technology Officer Designate

23 Lufthansa Cargo's final MD-11F arrived in Frankfurt, bringing an end to the group's tri-jet era.

28 Gulfstream Aerospace Appoints Empire Aviation Group as International Sales Representative for India



06 Embraer and CAE Launch a New Phenom 300 Full-Flight Simulator for U.S. Market



09 Embraer Announce a Pool Agreement with KLM Cityhopper for the E195-E2s Fleet



17 Leonardo's AWhero achieves military certification for Rotary UAS



25 ULD sharing platform skypooling can save 25,000 tons of CO2 annually

AVIATION UPDATE

India's premier aviation monthly magazine

Vol : 08 Issue : 3 NOVEMBER - 2021

Editor-in-Chief : B. Kartikeya

EDITORIAL

Special Editor : Rohith Reddy

Associate Editor : Mahua sinha roy

Correspondent : B. Martin

CREATIVE HEAD : Rajesh Bali

PHOTOGRAPHER : Krishanth

MARKETING

Manager, Marketing : Rohith Reddy

SUBSCRIPTION

Asst. Manager, Subscription : Naheda

Sr. Customer Support Officer : Sony

FINANCE & ADMINISTRATION

Sr. Manager : Karunandhi

Asst. Manager : Md. Wajid Ali

Editorial & Advertising Offices

Aviation Update

16-11-741/6/E/50, S.B.H COLONY, DILSUKHNAGAR,
HYDERABAD-500 060, India.
Tel: 09444499221, 040-24055553.

Subscription/ Circulation

Annual Subscription: 1800 INR – 12 Issues

E-mail: info@aviationupdatemagazine.com

Letter to editor

editor@aviationupdatemagazine.com

For Advertising details contact

marketing@aviationupdatemagazine.com

All information in Aviation Update information 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 advise 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,
Ellies 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



Hello Folks,

Let me apologize for the delay in bringing out the latest issue of our favourite Aviation magazine. They call it No shave November but I say its 'Never too late' November as we got you some extra punch that would cover a bit of news from the current month too which you would have missed out if it was rolled out in accordance with the usual intervals. I'm trying to justify though. Never mind.

Prestigious Dubai Airshow this time as usual not just presented the thrilling display of aircraft in action but also concluded with the ground breaking deals and agreements. The major mention would definitely be the order of 737 Max by Akasa Air concerning the Indian Aviation industry. We brought you a value added stories on the Recruitment strategies for 2022 on top of Dubai Airshow which you should not miss out.

Should I ask you to go through the pages on Air cargo, appointments, Defense and Military and the latest news briefings from Aviation industry? No, I don't think so. As I believe, you would definitely do the reading on those pages.

I don't know about you, but I have already started counting down the number of days to the start of a new year, which would obviously come down by the time I reach you with the next issue of Aviation update. Can't wait to hear my count? But you should. Till you hear from me in the next issue of our beloved magazine, I take your leave by saying 'Kartikeya signing off'. Ciao...

Thanks

B. Kartikeya
Editor

■ INDIGO CAUTIONS CANDIDATES TO BEWARE OF FAKE JOB OFFERS



In its bid to create awareness, IndiGo, issued advisory to be cognizant around fake job offers. IndiGo, through its creatives on anti-fake jobs campaign across social media and website is raising awareness of how certain people claiming to represent IndiGo are misusing the brand name and the names of IndiGo employees, demanding money in exchange for interviews, jobs, or trainings. The airline does not charge any money for conducting interviews, providing jobs, or imparting trainings on joining. IndiGo strictly advises to report the matter to the police if someone asks for money and promises a job at the airline. IndiGo is also taking appropriate actions for cases that get reported, along with spreading awareness.

Raj Raghavan, Senior VP & Head of Human Resources, IndiGo said, "IndiGo is fully committed to eradicating scams perpetuated on innocent job seekers by miscreants posing as company representatives. During the last few years, we have successfully collaborated with Law enforcement agencies who have been very helpful in apprehending these scamsters. However, we believe that this can be curbed completely only when gullible job seekers don't fall prey to such people. I would like to reiterate that IndiGo does not charge the candidates and anyone seeking money from a candidate, however small it may be, is out there only to dupe people."

Ronojoy Dutta, Whole-time Director & Chief Executive Officer, IndiGo said, "We have been cautioning job seekers through awareness campaigns via advisories and commercials. We believe that as the market leader, it is our responsibility to identify and control such malpractices that not just impact IndiGo but also other companies in the sector. We have been working in close collaboration with law enforcement department to identify these offenders with success in the past. We hope to put an end to this menace with support from the police department and awareness amongst people."

■ TATA GROUP TO ACQUIRE 100% STAKE IN AIR INDIA



India's largest conglomerate, Tata Sons (Tata), has acquired the country's government-owned, debt-ridden carrier, Air India, having outbid SpiceJet to return the carrier to the private sector. It is understood that Tata will pay US\$2.4 billion, (INR180 billion), while SpiceJet had offered INR151 billion. Tata will absorb INR153 billion of the carrier's current debt of INR615 billion.

Air India was founded in 1932 by Tata and was taken over by the Indian Government in 1953. Ratan Tata, the chairman emeritus of Tata Sons, said in a tweet: "The Tata Group winning the bid for Air India is great news! While admittedly it will take considerable effort to rebuild Air India, it will hopefully provide a very strong market opportunity to the Tata Group's presence in the aviation industry."

During the previous ten years Air India has run at a substantial loss and has suffered from overly bureaucratic management and political interference as privately owned low-cost carriers gained traction in the market. The carrier operates on both domestic, medium-, and long-haul routes, while also operating budget airline Air Asia India in conjunction with Air Asia Berhad. It also operates Vistara, a full-service carrier, alongside Singapore Airlines. Tata will be acquiring a fleet of 121 Air India aircraft, together with 25 planes from its subsidiary Air India Express, which operates low-cost flights to more than 30 destinations in India, the Middle East and south-east Asia. (US\$1.00 = INR75.13 at time of publication.)

■ VISTARA AND LUFTHANSA ENTER FREQUENT FLYER PARTNERSHIP



Vistara announced a reciprocal partnership for its frequent flyer program, Club Vistara (CV), with Lufthansa's Miles & More frequent flyer program.

The partnership enables Club Vistara members to earn and redeem CV Points on flights operated and marketed by Lufthansa, covering an extensive network of nearly 200 destinations across the world. Reciprocally, Miles & More members will be able to earn and redeem miles on flights operated by Vistara. The partnership agreement comes into effect on 27 October 2021.

Vistara's Chief Commercial Officer, Mr. Vinod Kannan, said: "We are delighted to extend our strong partnership with Lufthansa and bring synergies between our respective frequent flyer programs. I am confident that this will enable us to provide greater value and convenience to our Club Vistara members on their travels across the world. We are also equally excited to welcome Miles & More members and provide them a consistent, world-class flying experience when they fly 'India's best airline'."

"We are pleased to strengthen the already started codeshare partnership between Vistara and Lufthansa with the start into the Miles & More programme", said Christopher Sieglösch, Senior Director Loyalty Programme Development & Service at Miles & More GmbH. "Vistara as a strong partner and popular airline extends our airline portfolio and therefore offers added value to our Miles & More members which now have the opportunity to earn and redeem miles on Vistara flights."

■ SPICEJET STRENGTHENS ITS DOMESTIC NETWORK WITH 28 NEW FLIGHTS



SpiceJet announced the launch of 28 new flights on its domestic network starting 31st October, 2021. The airline will launch multiple new non-stop flights connecting the tourist hotspots of Jaipur, Jaisalmer,

Jodhpur and Udaipur in Rajasthan with key metros and cities as part of its new winter schedule.

Shilpa Bhatia, Chief Commercial Officer, SpiceJet said, "With the onset of festive season and leisure travel demand picking up significantly, we have ensured seamless connectivity for our passengers from across the country to Rajasthan, one of the most preferred tourist destinations in the country during winters. As demand improves, SpiceJet is committed to introducing more new flights that will help in reviving travel and tourism."

SpiceJet will also be connecting Bagdogra with Ahmedabad, Kolkata with Srinagar and will add two new flights on the Bengaluru-Pune sector.

SpiceJet recently announced the addition of Kushinagar to its domestic network starting 26th November, 2021. The airline will add Kushinagar in Uttar Pradesh as its newest UDAN destination and connect it with the National Capital. The airline will be connecting Kushinagar with two more key metros – Mumbai and Kolkata – starting 18th December, 2021.

■ EMBRAER AND CAE LAUNCH A NEW PHENOM 300 FULL-FLIGHT SIMULATOR FOR U.S. MARKET



Embraer and CAE announced, at the 2021 National Business Aviation Association (NBAA) annual convention and exhibition, that Embraer-CAE Training Services (ECTS) will offer a new full-flight simulator (FFS) for the Phenom 300E during the second half of 2022 to meet the growing demand for business jet training in the U.S. This new FFS will be operated by ECTS, a joint venture between Embraer and CAE. The FFS's location will be defined by ECTS in the coming months.

"Our purpose with the new FFS, besides offering our customers additional capacity for training in the U.S., is to bring the latest technological updates of the aircraft and simulation technology, while providing the highest level of service to the market as the number of Phenom 300E deliveries continues to grow," said Johann Bordais, President & CEO, Embraer Services & Support.

The best-selling light jet in the world for nine years in a row, the Phenom 300E leads the way in terms of technology, performance and comfort. The light jet, which has 600 units in operation, is capable of reaching Mach 0.80 and offers unmatched avionics—including Runway Overrun and Awareness Alerting System (ROAAS), Emergency Descent Mode, coupled go-around, and more—allowing customers to reach their destinations quicker and with superior comfort.

"We are happy to help Embraer enhance pilot training," said Nick Leontidis, CAE Group President, Civil Aviation Training Solutions. "Through this important initiative we will help meet the growing demand for business jet pilots by combining innovative methodologies, knowledgeable instructors, and advanced simulation technology."

■ MIXED FLEET FLYING FOR A380 AND A320 APPROVED BY JAPAN'S CIVIL AVIATION BUREAU



All Nippon Airways (ANA) is set to introduce Mixed Fleet Flying (MFF) for the A380 and A320 Family following approval by Japan's Civil Aviation Bureau (JCAB). The Japanese carrier is the first operator in the world to introduce the MFF between the two types.

MFF is unique to Airbus aircraft. As a result of flight deck and aircraft control systems it enables pilots to be certified to operate

more than one type from the Airbus fly-by-wire product line on a regular and concurrent basis. At ANA this will enable crews to fly a mixed pattern of short and long haul services.

Airbus commonality extends from the flight deck into the passenger cabin as well, with a maximum use of similar systems, control panels and procedures within the various aircraft families. The unique level of technical commonality between Airbus fly-by-wire aircraft also streamlines maintenance procedures, resulting in significantly reduced costs.

"We are pleased that A320 and A380 MFF operations were approved by JCAB and that ANA has become the world's first airline to introduce it," said Stéphane Ginoux, Head of North Asia region for Airbus and President of Airbus Japan. "MFF offers airlines increased flexibility and cost-efficiency and has become one of the keys to Airbus' success. For airlines, the increase in revenue hours flown by pilots due to less standby and downtime results in a significant improvement in productivity."

■ INDIAN NAVY EXPANDS MARITIME RECONNAISSANCE CAPABILITIES WITH DELIVERY OF 11TH P-8I



Boeing is continuing to expand the Indian Navy's long-range maritime reconnaissance anti-submarine warfare capabilities with the delivery of the country's 11th P-8I. The patrol aircraft is an integral part of the Indian Navy's fleet and has surpassed 30,000 flight hours since it was inducted in 2013. This is the third aircraft to be delivered under an option contract for four additional aircraft that the Indian Ministry of Defence awarded in 2016. The Indian Navy was the first international customer for the P-8 and today operates the largest non-U.S. fleet. The P-8 is also

operated by the U.S. Navy, the Royal Australian Air Force and the United Kingdom's Royal Air Force. In addition to unmatched maritime reconnaissance and anti-submarine warfare capabilities, the P-8I has been deployed to assist during disaster relief and humanitarian missions.

Boeing supports India's growing P-8I fleet by providing training of Indian Navy flight crews, spare parts, ground support equipment and field-service representative support. Boeing's integrated logistics support has enabled a high state of fleet readiness at the lowest possible cost.

Boeing is completing construction on the Training Support & Data Handling (TSDH) Centre at INS Rajali, Arakkonam, in Tamil Nadu, and a secondary center at the Naval Institute of Aeronautical Technology, Kochi, as part of a training-and-support package contract signed in 2019. The indigenous, ground-based training will allow the Indian Navy crew to increase mission proficiency in a shorter time, while reducing the on-aircraft training time resulting in increased aircraft availability for mission tasking.

■ SPICEJET LAUNCHES ITS NEW WEBSITE AIMED AT PROVIDING AN ENHANCED CUSTOMER EXPERIENCE



SpiceJet has launched its new revamped website with vastly improved features offering its customers a highly personalized experience through superior navigation and functionality. The new website (www.spicejet.com) has been developed with state-of-the-art web technologies and has a simple, refreshing and uncluttered design and effective user interface with many enhanced features. The user-interface is faster, more intuitive, easily navigable, scalable and responsive and even more user-friendly than before.

The use of latest technology has helped ensure that SpiceJet's system is fast, scalable and secure. It is also designed to facilitate quick changes which will help us in introducing new products and offers to the customers quickly.

Ashish Vikram, Chief Technology and Innovation Officer, SpiceJet said, "The all new avatar of our revamped website is a major leap towards superlative, innovative and user-friendly interface for an extraordinary customer experience. Our new website includes a host of exciting and user-friendly features that will help customers navigate better and make flying with SpiceJet an even more memorable experience."

"Our new website incorporates a refreshing new look and features which will enhance the overall experience whether accessed from the desktop or mobile. SpiceJet has been dedicatedly investing on innovation, technology, safety and simplicity in everything it does and our revamped website is the perfect example of the same philosophy."

In line with the airline's commitment to sustainability, web check-in will now be faster and paperless with mobile boarding passes delivered via SMS. The new website will also allow passengers to check and compare seven days lowest fares on our enhanced flight selection page with additional filter options. Customer can easily compare different types of available fares including complete fare and baggage policies. The new site has a simple user-friendly interface and allows complete bookings with minimum steps.

The new website provides faster and secure payment options and customers can choose real-time promos and offers to get additional discounts.

■ BNDES SUPPORTS EXPORT OF 24 EMBRAER AIRCRAFT TO THE US



The Brazilian Development Bank (BNDES) approved financing to export 24 Embraer E175 commercial jets to SkyWest Airlines, the world's largest regional aviation company, based in Utah in the U.S. The deal strengthens Brazil's industry at a time when it is still feeling the effects of the COVID-19 pandemic and boosts the presence of high-tech Brazilian products in the world's largest and most competitive aviation market. The deliveries began in August and will continue until April 2022.

The financing of over US\$ 500 million (more than R\$ 2.6 billion), is in line with operations carried out by export credit agencies in countries with cutting-edge aeronautical industries. The aeronautical sector is considered strategic by the nations due to aspects such as advanced technology, continuous innovation, and highly skilled workers. Export credit agencies operate to complement the private credit market, doing so more intensely in times of crisis, which is clear in the history between the BNDES and Embraer.

Bruno Aranha, director of Productive and Socio-environmental Credit at BNDES, stresses the institution's importance in financing exports: "BNDES has an established and significant presence in Brazil's export system, having an ant cyclical performance that has maintained Brazilian exporters over more than 25 years. This deal is another important step for BNDES, supporting Embraer in the resumption of sales growth in the context of the greatest challenge ever faced in the history of the aeronautical sector, thus ensuring the maintenance of qualified jobs in the country," he says.

■ INDIGO STARTS DIRECT FLIGHTS FROM SHILLONG TO DIBRUGARH UNDER RCS SCHEME



IndiGo announced its direct flights between Shillong and Dibrugarh under RCS scheme, effective October 26, 2021. The new route was inaugurated with lamp

lighting at the Shillong airport as well as Ministry of Civil Aviation in New Delhi. The ceremony was graced by Honourable Union Minister for Civil Aviation – Shri Jyotiraditya Scindia (virtually), Honourable Chief Minister of Meghalaya, Conrad Sangma (virtually-TBC), and other eminent dignitaries from Shillong at the airport. The addition of Shillong as a destination, is a part of IndiGo’s strategy to enhance domestic connectivity to Northeastern parts of the country, to fulfil demand from regional centres while enhancing accessibility.

Mr. Sanjay Kumar, Chief Strategy and Revenue Officer, IndiGo said, “We are pleased to commence direct connections between the capital of Meghalaya and industrial city of Assam under Regional Connectivity Scheme. These new domestic flights will strengthen regional connectivity and promote trade, commerce, as well as tourism through increased accessibility. The hill-station of North-eastern India, Shillong, is known for its natural beauty and indigenous cultures. Direct connections between the tea city of India, Dibrugarh to the capital city of Meghalaya, will cater to the regional travel demand. The introduction of these new routes will further bolster the airline’s domestic network, while augmenting inter and intraregional accessibility. We are committed to providing an affordable, on-time, safe and hassle-free travel experience, onboard our lean clean flying machine.”

■ **GLOBAL MEDICAL RESPONSE ORDERS 21 NEW AIRBUS HELICOPTERS**



Global Medical Response (GMR) will add a total of 21 Airbus helicopters from the H125, H130 and H135 families to its growing air medical fleet, with options to include up to an additional 23 helicopters, bringing the total order potential up to 44 helicopters.

“We fly a variety of Airbus products, but the main thing they have in common – and the most important thing we look for in our critical care transport solutions – is reliability,” said Rob Hamilton, president of the GMR Alliances Group. “Our Airbus fleet allows us to respond quickly and transport critical patients with the appropriate level of care to give them the absolute best chance of survival. With the addition of these new aircraft, our fleet grows stronger and more capable to save lives when it matters most.”

GMR, an industry-leading air, ground, specialty and residential fire services and managed medical transportation organization with more than 38,000 employees, is one of the largest operators of Airbus helicopters. GMR delivers care through multiple operating brands, including Air Evac Lifeteam, Guardian Flight, Med-Trans Corp., and REACH Air Medical Services. These operations transported more than 125,000 patients in 2020. This latest order will add to GMR’s current Airbus fleet of nearly 133 helicopters.

This announcement expands upon additional orders from GMR in recent years as part of an ongoing fleet expansion. In the past 18 months alone, GMR has taken delivery of 15 Airbus helicopters.

“The air medical mission demands high availability rates. The H125 and H130 set the standard in the single-engine segment, and the H135 has stood out in the twin-engine segment thanks to its consistent reliable performance in this mission,” said Romain Trapp, president of Airbus Helicopters, Inc. and head of the North America region. “The fact that GMR’s entire twin-engine fleet is made up of the H135 speaks volumes to its success in the air medical market. We are proud to continue delivering on our longstanding relationship with GMR and stand ready to continue to support the highest levels of availability for their essential work.”

■ **HONEYWELL AND AJW GROUP ANNOUNCE GLOBAL DISTRIBUTION AGREEMENT FOR 787 PRODUCTS**



AJW Group and Honeywell have signed a worldwide sole distributor agreement for the global sales of 29 Honeywell standard-fit new products for the Boeing 787 platform. Under the terms of the agreement, AJW will be the sole aftermarket distributor for all Honeywell new products fitted to the current and future fleet of 787s.

The agreement will cover initial provisioning and on-going purchasing requirements for all operators and integrated service providers worldwide. The list covers parts ranging from inertial reference units to flight control modules and global navigation satellite systems antenna to dual axis modal suppression accelerometers, applicable to the 787.

The collaboration includes AJW holding distribution inventory at their global facilities.

“We are proud to announce the additional sole distribution agreement covering the 787 product along with the recent appointment as sole distributor for the latest A320/A330 ADRIU with Honeywell and look forward to a continuation of our long-standing relationship in offering world-class service to 787 operators worldwide,” said AJW Group’s SVP strategic material & asset management Conrad Vandersluis .

■ **ROLLS-ROYCE JOINS BOEING AND WORLD ENERGY FOR SUCCESSFUL 100% SUSTAINABLE AVIATION FUEL FLIGHT**



Rolls-Royce, working with Boeing and World Energy, has carried out a successful test flight of its 747 flying testbed aircraft using 100% Sustainable Aviation

Fuel (SAF) on a Trent 1000 engine. The aircraft flew from Tucson airport in Arizona, passing over New Mexico and Texas, with a Trent 1000 engine running solely on 100% SAF while the remaining three RB211 engines ran on standard jet fuel, arriving back at the airport three hours and 54 minutes later.

Initial indications confirm there were no engineering issues, providing further proof of the fuel's suitability for commercial use. Rolls-Royce has continued to pioneer the adoption of 100% SAF, and validation of this test adds to those already carried out on its Trent XWB and Pearl engines, both on the ground and in the air. Last week it confirmed that all of its Trent engines will be compatible with 100% SAF by 2023 and also called for further ambition and collaboration across the aviation sector, and with governments, to enable the transition of long-haul aviation towards net zero ahead of aviation goals set by the UN Race to Zero.

Aircraft are currently only certified to operate on a maximum of 50% SAF blended with conventional jet fuel and Rolls-Royce continues to support efforts to certificate non-blended SAF. This is particularly important to support sustainability in long-distance air travel, which will require the power density of gas turbines for years to come. The flight was carried out in close collaboration with Boeing, which provided technical support and oversight on aircraft modifications and assurance the aircraft systems would operate as expected with 100% SAF. World Energy, the world's first and America's only commercial-scale SAF production company, provided the low-carbon fuel for the flight.

■ A.P. MOLLER - MAERSK ORDERS TWO BOEING 777 FREIGHTERS

Boeing and A.P. Moller - Maersk (Maersk) announced the global provider of end-to-end container logistics has placed an order for two 777 Freighters. The freighters will be operated by Star Air, Maersk's in-house aircraft operator and is the company's first 777 order. Star Air currently

operates an all-Boeing 767 Freighter fleet.

"As a global integrator of container logistics, Maersk is improving the ability to provide one-stop shop and end-to-end logistics capabilities to our customers. This year, we have strengthened our integrated logistics offering through e-commerce logistics acquisitions, tech investments, expanding our warehouse footprint and as a natural next step, we are now ramping up our air freight capacity, creating a broader network to cater even better for the needs of customers," said Vincent Clerc, executive vice president and CEO of Ocean & Logistics, A.P. Moller - Maersk.

The 777 Freighter is the world's largest, longest range and most capable twin-engine freighter. The airplane offers 17 percent better fuel efficiency and reduced CO2 emissions compared to legacy airplanes. With a range of 9,200 kilometers, the 777 Freighter can carry a maximum revenue payload of 102,000 kilograms, allowing Star Air to make fewer stops and reduce landing fees on long-haul routes.

"We are delighted to welcome Maersk's Star Air to the Boeing family of 777 operators and look forward to many years of continued partnership as it grows its air cargo division," said Hssane Mounir, Boeing's senior vice president of Commercial Sales and Marketing. "The market leading efficiency and incredible range of the 777 Freighter will provide Maersk flexibility to profitably operate the airplane across its large air freight network."

■ GE AVIATION COMPLETES GENX ENDURANCE TESTING AS ENGINE CELEBRATES 10-YEARS IN SERVICE



The GE Aviation GenX engine recently achieved outstanding endurance test results, completing over 3,000 cycles of dust ingestion testing in a simulated severe environment using a specialized dust ingestion rig. The dust endurance testing is part of the company's continued investment in the next generation of technology for the engine line.

Ten years ago, the GenX engine entered service powering a Cargo lux 747-8. Developed for the Boeing 787 Dreamliner and 747-8 aircraft, the GenX has the advantage of lower fuel consumption and reduced CO2 emissions up to 15% compared to GE's CF6 engine.

The endurance tests validated several hardware improvements, including an improved combustor deflector and redesigned high-pressure turbine stage one blade. The endurance testing mimicked the dust GenX engines encounter flying in some of the most severe operating environments in the world. In partnership with GE Research, dust was reverse engineered to replicate specific field conditions. The dust, which can lead to hardware distress, is so fine that it cannot be seen with the naked eye. Test engineers used sophisticated equipment, including sensors sensitive enough to detect the dust, and lean principles to improve the findings during the test campaign.

■ EMBRAER ANNOUNCE A POOL AGREEMENT WITH KLM CITYHOPPER FOR THE E195-E2S FLEET



Embraer announced at MRO Europe, a leading aeronautical maintenance event, a Pool Program agreement with KLM Cityhopper, the regional subsidiary of KLM

Royal Dutch Airlines. The contract includes broad component support for the airline's E195-E2s fleet. Currently, Embraer's Pool Program supports more than 50 airlines worldwide.

The airline received the first E195-E2 of the 25 jets it has on order, at the beginning of 2021, with all E2 being covered by this contract. Currently, KLM Cityhopper already operates a total of four E195-E2 and a fleet of 49 first generation E-Jets.

"As the operator with the largest E-Jet fleet in Europe, KLM Cityhopper has vast experience with E-Jets operations and maintenance – and very high standards, especially regarding aircraft availability. This contract is a great endorsement from KLM Cityhopper and continues Embraer's success in providing comprehensive support and services for E2 customers," said Johann Bordais, President & CEO, Embraer Services & Support.

Embraer's Pool Program is designed to allow airlines to minimize their upfront investment on high-value repairable inventories and resources and to take advantage of Embraer's technical expertise and its vast component repair service provider network. The results are significant savings on repair and inventory carrying costs, reduction in required warehousing space, and the virtual elimination of the need for resources required for repair management, while ultimately providing guaranteed performance levels.

BREEZE AIRWAYS UNVEILS FIRST OF 80 AIRBUS A220S ON ORDER



Breeze Airways (Breeze) unveiled its first of 80 A220-300 aircraft on order during a preview event at the Airbus A220 final assembly line in Mobile, Alabama. The aircraft is expected to be delivered to Breeze in the coming weeks.

Breeze's A220-300 cabin is configured in a comfortable two-class 126 seat premium cabin layout comprising 36 business and 90 economy seats fitted with in-seat power and USB ports for all passengers.

Breeze will offer superior single-aisle comfort on board its brand new A220s, such as the widest seats, the largest windows and more overhead stowage space per passenger.

The A220's superior efficiency will support the new airline's business objectives to deliver a great travel experience to its passengers, with low fares and high flexibility. Breeze is expected to provide non-stop service between underserved routes across the U.S. at affordable fares - offering point-to-point flights from smaller secondary airports, bypassing hubs for shorter travel times.

Breeze started airline operations in May 2021. This first A220 is expected to enter service in Q2 2022.

BOEING DELIVERS FIRST KC-46A TANKER TO JAPAN



Boeing has delivered its first KC-46A tanker to the Japan Air Self-Defense Force (JASDF) marking the program's first delivery to a customer outside the United States.

"This is an exciting and historic moment for the Japan Air Self-Defense Force and Boeing as Japan joins the United States with the world's most advanced, proven and safe multi-mission combat aerial

refueling capability," said James Burgess, Boeing vice president and program manager, KC-46 Program. "We are looking forward to decades of partnership with our Japan customer to ensure aircraft mission effectiveness and enable the success of the JASDF."

The Japan KC-46A is capable of refueling JASDF, U.S. Air Force, U.S. Navy, and U.S. Marine Corps aircraft. Globally, the KC-46A has already completed more than 5,000 sorties and transferred more than 50 million pounds of fuel to other aircraft through its boom and drogue systems.

"Japan's acquisition of KC-46A tankers marks a significant milestone for both the program and U.S.-Japan cooperation in the Indo-Pacific region and plays a critical role in the security alliance between both countries," said Will Shaffer, president of Boeing Japan. "With its ability to carry cargo and passengers, the KC-46A tanker can also support Japan's humanitarian and disaster relief efforts."

The versatile, multi-role tanker carries 18 military standardized pallets (463L) in cargo configuration and accommodates a mixed load of passengers and cargo. It is also equipped with robust defensive and tactical situational awareness systems that will help Japan secure and maintain its air superiority.

The U.S. Air Force and JASDF awarded Boeing a Foreign Military Sale contract for this first JASDF KC-46A in December 2017, and exercised an option for a second in December 2018. Options for the third and fourth JASDF KC-46As were exercised in October 2020.

Boeing builds KC-46A aircraft for the U.S. Air Force, Japan Air Self-Defense Force and other international customers on its 767 production line in Everett, Washington. In addition, Boeing's Japanese partners produce 16 percent of the KC-46A airframe structure.

Boeing is currently assembling the second KC-46A for Japan and has delivered 48 KC-46As to the U.S. Air Force, beginning with the first delivery in January 2019.



Air Marshal BR Krishna assumes charge of CISC

Air Marshal BR Krishna assumed charge of Chief of Integrated Defence Staff to the Chairman, Chiefs of Staff Committee (CISC) on October 01, 2021. The CISC paid homage to the bravehearts at the National War Memorial, in New Delhi followed by Tri-Service Guard of Honour.

Commissioned as a fighter pilot in 1983, Air Marshal Krishna has had a distinguished career spanning over 38 years. Qualified Flying Instructor and experimental test pilot, he has flown a wide variety of fighters, transport aircraft, and helicopters in the inventory of Indian Air Force (IAF). He has over 5,000 hours of flying experience including operational, instructional and test flying. He is an alumnus of National Defence Academy, Defence Services Staff College and National Defence College.

During his illustrious career, the CISC has held numerous important command and staff appointments. He commanded a frontline Fighter Squadron and Air Force Test Pilots School. He was Chief Operations Officer of a Forward Air Base, Commandant of Aircraft and System Testing Establishment and commanded a Frontline Air Base.

Air Marshal B R Krishna was Assistant Chief of Air Staff (Projects) and Assistant Chief of Air Staff (Plans) at the Air Headquarters. As an Air Marshal, he served as Senior Air Staff Officer, South Western Air Command & Director General Air Operations. Prior to taking over as CISC, he was commanding Western Air Command. Air Marshal was awarded Shaurya Chakra for gallantry in 1986 and AtiVishishtSeva Medal for distinguished service in 1987.



SR Technic's business development team welcomes Anisa Diwakar

SR Technics, a world leading MRO service provider, is pleased to announce that Anisa Diwakar has joined its Business Development team as Head of Parts Repair Customer Services.

Anisa Diwakar started with SR Technics in 2014 as Account Manager Engines, responsible for execution and integration of engine MRO contracts for CFM56-7B/-5B and PW4000. She successfully managed several key accounts and customer services integration for multiple international airlines, specifically in the regions of Asia and the Americas.

Prior to joining SR Technics, she spent seven years at Jet Aviation Basel in various roles, including Supply Chain Management, mainly responsible for Engine & APU Procurement services and activities.

Ms. Diwakar holds a Bachelor of Science degree in Aviation Business Administration from Embry-Riddle Aeronautical University and has completed technical courses for Honeywell, Pratt & Whitney, and IAE engine types.



Grazia Vittadini joins Rolls-Royce as Chief Technology Officer Designate

Rolls-Royce has released that Grazia Vittadini, former CTO at Airbus, will be joining as Chief Technology Officer, Designate, to succeed Paul Stein when he steps down next year after almost 12 years leading the company's pioneering research and technology efforts. Separately, Harry Holt, Chief People Officer, has decided to leave to take up the post of Chief Operating Officer at Vertical Aerospace. His successor will be announced in due course.

Vittadini, who will join on November 2, 2021, spent almost 20 years at Airbus and over the last decade held a number of senior positions, most recently Chief Technology Officer. As CTO, she piloted Airbus into bold, new, and sustainable technologies, ranging from electrification and hydrogen-based propulsion to digitization and Artificial Intelligence, autonomy, connectivity and advanced materials, while creating a diverse, high-performing technology organization. She stood down from her CTO role at Airbus in July and leaves at the end of October.



Boeing names Heidi Grant as Business Development Leader

Va. Heidi Grant, director of the US Defense Security Cooperation Agency (DSCA), has been selected to lead Boeing's defense, space and government services sales teams. She will join the company Nov. 8 as vice president of Business Development, leading the organization previously known as Global Sales and Marketing (GSM).

In her current role she is responsible for the administration and execution of US Department of Defense security cooperation programs and activities involving defense articles, military training and other defense-related services. She began her US Department of Defense career in 1989 and held key roles with the departments of the Navy and Air Force, Office of the Secretary of Defense, the Joint Staff and two combatant commands with assignments from base to headquarters levels, including an overseas assignment.

"Heidi brings extensive experience in global strategy and competitive positioning across the life cycle," said Leanne Caret, President and CEO, Boeing Defense, Space & Security. "We look forward to working closely with her as we compete, win and grow our business around the world."

Grant will report to Caret and Boeing Global Services President and CEO Ted Colbert and serve on both leadership teams. She will be based in Arlington, Virginia.

Grant succeeds Jeff Shockey, who departed the company in July. Mike Manazir, who has served as interim GSM vice president, returns to his role as vice president, Boeing Global Services business development.



Air Marshal Sanjeev Kapoor Assumes Charge as Commandant, NDA

Air Marshal Sanjeev Kapoor took over charge as Commandant, National Defence Academy (NDA) on October 31 from Lt Gen Asit Mistry who retired on November 1 after serving in the Indian Army for 39 years.

Air Marshal Sanjeev Kapoor, AVSM, VM was commissioned in flying branch of the IAF in December 1985. He has over 7800 hours of accident/ Incident free flying on various trainer, transport and strategic aircraft. He is an alumnus of National Defence Academy (67th Course D Squadron), Defence Services Staff College, Flying Instructor School, College of Defence Management and National Defence College. His educational qualifications include M. Sc (Defence Studies), Master of Management Studies and M. Phil. He is presently pursuing his Ph.D from Osmania University.

The Air Officer has participated in numerous flying exercises and operations in India and abroad. The Air officer as Flying Instructor has done Instructional tenures at Air Force Academy and Fixed wing Training Flight, Yelahanka. His vast experience in High Altitude, VVIP, Air to Air Refuelling and Combat Operations led him to head the operational assignments at highest levels. He is one of the pioneers in Aerial Refuelling Operations in the Indian Air Force who was trained abroad with OEM. His Command appointments include the command of Air to Air Refuelling Squadron and a large Operational Base with Strategic assets. His Staff appointments include Director and Principal Director (Operations) at Air HQ, Head of the Faculty and Senior Air Force Instructor at College of Defence Management, Secunderabad, Assistant Chief of the Air Staff Operations (Transport & Helicopters) and Assistant Chief of the Staff (Personnel Airmen and Civilian) at Air Headquarter (Vayu Bhawan) and Commandant, Air Force Academy. The Air Officer has been awarded Vayu Sena Medal and Ati Vishist Seva Medal for his devotion to duty.



Lockheed Martin Elects John M. Donovan to Board of Directors

Lockheed Martin Corporation announced its board of directors has elected John M. Donovan to the board, effective immediately. The board determined that Donovan is an «independent director» in accordance with the New York Stock Exchange listing standards, the rules and regulations of the Securities and Exchange Commission, and the corporation's corporate governance guidelines. Donovan will serve on the corporation's Classified Business and Security Committee.

Previously Donovan served as CEO of AT&T Communications, LLC, a wholly owned subsidiary of AT&T Inc., from August 2017 until his retirement in October 2019. He was chief strategy officer and group president of AT&T Technology and Operations from January 2012 through August 2017, and chief technology officer of AT&T Inc. from April 2008 through January 2012. Prior to AT&T, Donovan was executive vice president of product, sales, marketing and operations at VeriSign Inc., an internet infrastructure company. He also was chairman and CEO of inCode Telecom Group Inc., where he helped shape strategy for wireless carriers worldwide, and was a partner with Deloitte Consulting, where he was the Americas telecom practice director.

Donovan is chair of the President's National Security Telecommunications Advisory Committee; a board member of Palo Alto Networks, a global cybersecurity company; and the author of multiple books on organizational leadership and advanced networking.



HAL Delivers 200th Gun Bay Door for Boeing F/A Super Hornet

HAL has made a milestone delivery of the 200th gun bay door for Boeing F/A-18 Super Hornet. HAL has been supplying the aero-structure to Boeing for the last 10 years.

Mr. R. Madhavan, CMD, HAL said, "HAL has a long-standing partnership with Boeing and we look forward to strengthening our association on military and civil programs. We are prepared to collaborate with Boeing to boost manufacturing under the Atmanirbhar Bharat and Make in India programs".

"Our partnership with HAL is an example of our commitment to Atmanirbhar Bharat and to the growth of India's aerospace and defence ecosystem. We see tremendous potential for India to contribute to the global aerospace industry as an industrial and technology partner. This partnership is a testimony to the world class capability of our industrial partners in the country", said Mr. Salil Gupte, President, Boeing India.



Surface to Surface Ballistic Missile, Agni-5, successfully launched

A successful launch of the Surface to Surface Ballistic Missile, Agni-5, was carried out on October 27, 2021 at approximately 1950 hrs from APJ Abdul Kalam Island, Odisha. The missile, which uses a three-stage solid fuelled engine, is capable of striking targets at ranges up to 5,000 kilometres with a very high degree of accuracy.

The successful test of Agni-5 is in line with India's stated policy to have 'credible minimum deterrence' that underpins the commitment to 'No First Use'.



HAL's Avionic Equipment Gets ITSOA Certificate for Civil Platforms, First in India

HAL's avionic equipment 'Air Data Computer (ADC) with Outside Air Temperature (OAT) Probe' has received Indian Technical Standard Order Authorisation (ITSOA) certificate from DGCA for civil platform. The certification is for both hardware and software.

The ADC/OAT is the first avionic equipment in India that has qualified for ITSOA and will pave the way for the fitment on future civil platforms like ALH, Dornier, LUH, SARAS etc. This is an achievement towards mission 'Aatmanirbhar Bharat'.

The ADC is used to calculate the air data parameters like pressure altitude, calibrated airspeed, mach number, total air temperature, vertical speed based on static pressure, total pressure and outside air temperature inputs.

HAL's Strategic Electronics Research and Development Centre (SLRDC), Hyderabad indigenously designed and developed the first 'Air Data Computer ADC 3600A CVL1' which has environmentally qualified as per DO-160G standard along with in-house developed application software certified as per DO-178C, Level A, required for Civil platforms of aircraft and helicopters.

DRDO & IAF jointly flight test Long-Range Bomb successfully



Defence Research and Development Organisation (DRDO) and Indian Air Force (IAF) team jointly flight tested indigenously developed Long-Range Bomb (LRB) successfully from an aerial platform on October 29, 2021. The LR Bomb, after release from the IAF fighter aircraft, guided to a land-based target at a long range with accuracy within specified limits. All the mission objectives were successfully met. The flight of the bomb and the performance was monitored by a number of range sensors including Electro Optical Tracking System (EOTS), Telemetry and radar deployed by the Integrated Test Range, Chandipur in Odisha.

The LR Bomb has been designed and developed by Research Centre Imarat (RCI), a DRDO laboratory located at Hyderabad in coordination with other DRDO laboratories.

Raksha Mantri, Shri Rajnath Singh has congratulated DRDO, IAF and other teams associated with successful flight trial and stated that this will prove to be a force multiplier for the Indian Armed Forces.

Secretary DDR&D and Chairman DRDO, Dr G Satheesh Reddy in his message to the teams said that successful flight test of Long-Range Bomb has marked an important milestone in indigenously development of this class of systems.

Saab opens new U.S. production facility

Less than 300 miles will now separate Boeing from its T-7A teammate Saab with the opening of Saab's new 100,000-ft² production facility in West Lafayette, Indiana.

The Boeing-Saab team is producing the new advanced trainer for the U.S. Air Force, with Saab providing the aft section to Boeing's forward fuselage. Currently the aft section is built at Saab's factory in Linköping, Sweden, then shipped to the United States. Since the inception of the T-7A, Boeing and Saab have continued to seek and evolve new program efficiencies.

The T-7A Red Hawk went from concept to first flight in just 36 months using advanced model-based engineering and digital design techniques. The digital thread, the connection of digital information through product design, manufacturing, and inspection, used throughout the program has accounted for a 75% improvement in engineering quality. In September 2018, the U.S. Air Force awarded Boeing a US\$9.2 billion contract to supply 351 advanced trainer aircraft and 46 associated ground based training simulators.



Embraer, Fokker Techniek and Fokker Services sign MoU to pursue defense, development, and support opportunities

Embraer, Fokker Techniek and Fokker Services have signed a Memorandum of Understanding (MoU). The MoU opens up opportunities to explore a broad range of activities in the defense, commercial and support markets.

“Embraer is an ideal partner for this collaboration. Our heritage and deep understanding of aircraft products and solutions will allow us to bring a unique perspective to the many development areas that Embraer is investigating,” comments Roland van Dijk, CEO of Fokker Techniek. “Fokker Techniek and Fokker Services are well-known and reputable aerospace companies with roots in building aircraft and supporting aircraft fleets worldwide. Their network, experience and worldwide recognized aviation tradition will be a perfect match with Embraer Services and Support.

We believe together we can service our customers better with tailor-made solutions,” said Johann Bordais, President & CEO, Embraer Services & Support. In the coming months, Embraer, Fokker Services and Fokker Techniek will discuss a variety of opportunities and look to leverage their respective expertise and capabilities in new projects. For defense, this includes C-390 Millennium transport aircraft and potential specific end-user requirements as well as future fleet support.

Other opportunities for defense are under discussion such as conversion and completion of special mission and special transportation aircraft. In the commercial aviation market, engineering and logistic support will be key elements to be explored, in addition to hydrogen-powered aircraft development. Finally, aftermarket support topics such as program support, logistics, repair services, and all other support opportunities, will also be reviewed.

High-Speed Expendable Aerial Target ABHYAS successfully flight-tested by DRDO

ABHYAS - the High-speed Expendable Aerial Target (HEAT) was successfully flight-tested by Defence Research and Development Organisation (DRDO) from the Integrated Test Range (ITR), Chandipur off the coast of Bay of Bengal in Odisha. The vehicle can be used as an aerial target for evaluation of various missile systems. The performance of the target aircraft was monitored through telemetry and various tracking sensors including Radars and Electro Optical Tracking System (EOTS).

Defense Minister, Shri Rajnath Singh congratulated DRDO for the successful flight trial of Abhyas. The current flight test is carried out as a part of developmental flight trials. Expression of interest for production of the vehicle has already been floated to Indian industries. This indigenous target aircraft, once developed, will meet the requirements of High-speed Expendable Aerial Targets (HEAT) for Indian Armed Forces.

ABHYAS is designed & developed by DRDO's Aeronautical Development Establishment (ADE), Bengaluru. The air vehicle is launched using twin under-slung boosters which provide the initial acceleration to the vehicle. It is powered by a gas turbine engine to sustain a long endurance flight at subsonic speed. The target aircraft is equipped with MEMS based Inertial Navigation System (INS) for navigation along with the Flight Control Computer (FCC) for guidance and control. The vehicle is programmed for fully autonomous flight. The check-out of air vehicle is done using laptop-based Ground Control Station (GCS).



Leonardo's AWHero achieves military certification for Rotary UAS

Leonardo's AWHero RUAS (Rotary Uncrewed Aerial System) has received basic military certification from Italy's DAAA (Direzione degli Armamenti Aeronautici e per l'Aeronavigabilità), the Directorate for Air Armaments and Airworthiness. This achievement marks the world's first military certification for an RUAS in the 200kg class.

AWHero's design, development, production

and support meet military airworthiness authority requirements delivering the highest levels of mission safety, reliability and availability to Armed Forces. The military certification includes embarked operations and highlights the robustness of AWHero's design criteria and approach, paving the way for further development, integration and validation of expanded capabilities designed and planned for the system. This military certification is also based on elements of the worldwide recognised STANAG4702 standard.

AWHero design leverages on Leonardo's strength and extensive experience in rotorcraft development, system integration and embarked helicopter operations. Since 2019, the platform has been conducting maritime surveillance capability demonstrations on ships within the framework of the OCEAN2020 initiative, the European Defence Fund strategic research programme for naval surveillance technology and maritime safety, comprising 43 organisations across Europe and led by Leonardo.

AWHero is also being evaluated in international tenders. Northrop Grumman Australia and Leonardo Australia's team has been shortlisted to proceed to the next phase of the SEA129 Phase 5 programme for the acquisition of a maritime uncrewed aerial system designed to deliver a deployable intelligence, surveillance, reconnaissance and targeting capability to the Royal Australian Navy (RAN). The Northrop Grumman and Leonardo proposal will enhance capability effects and tactical decision making during RAN maritime operations.

HAL Delivers Heaviest Semi-Cryogenic Propellant Tank to ISRO

The heaviest Semi-Cryogenic propellant tank (SC120- LOX) ever fabricated by HAL has been delivered to Indian Space Research Organization (ISRO). The Propellant Tank was handed over by Mr. M K Mishra, GM of Aerospace Division, HAL to Mr. T.K.B. Kumaresh Babu, GM (LHWC), Head of the resident team of LPSC, ISRO in the presence of Mr. P Srinivasa Rao, GD (SR)-LPSC, at a function held in HAL.

The semi cryo-liquid oxygen (LOX) tank – the first developmental welded hardware is a part of the SC120 stage intended for payload enhancement by replacing the L110 stage in existing Mk-III launch vehicle.

Last year, HAL had delivered the biggest ever cryogenic Liquid Hydrogen tank (C32-LH2) which is four meters in diameter and eight meters in length, much ahead of contractual schedule.

HAL has mastered the skills and technologies required for fabricating welded propellant tanks. Till date, its Aerospace Division has delivered 244 propellant tanks and 95 water tanks to ISRO for the space programmes of PSLV, GSLV Mk-II and GSLV Mk-III of diameter 2.1, 2.8 and 4 meters where the length of the tank varies from 2.5 meters to 8.0 meters.

As a strategic reliable partner HAL has been associating with ISRO for India's prestigious space programs since last five decades. HAL has delivered critical structures, tankages, satellite structures for the PSLV, GSLV-Mk II and GSLV-Mk III launch vehicles. Various new projects like PS2/GS2 integration, Semi-cryo structure

fabrication and manufacturing of cryo and semi cryo engines are being taken up at HAL, for which installation and commissioning of unique infrastructures are nearing completion. HAL has supported ISRO right from the developmental phase of Crew Module Atmospheric Re-entry Experiment, PAD Abort test for Crew Escape for Human Space Mission and is currently supplying hardware for full-fledged launch vehicle GSLV Mk-III for prestigious Gaganyaan programme.



THE WORLD'S MOST EXCITING DUBAI AIRSHOW 2021 IS ON THE GO!



EXPO
2020

Most awaited airshow

Leaders and innovators in the aerospace industry are expected to attend the Dubai Airshow in 2021. A new startup hub, VISTA, will be launched at the Dubai Airshow 2021 in November, which will feature nine tracks packed with more than 50 hours of content on a wide range of aviation-related topics such as sustainability, aerial mobility and cargo as well as air traffic management, technology and space.

The 2021 Dubai Airshow will build on the remarkable success of the previous year's exhibition, attracting 84,000 trade visitors from 148 countries, 1,200 exhibitors, over 1,400 international and regional media, and an order book worth more than \$54.4 billion. Join us at the Dubai Airshow 2021, a community-building event.

This can help you grow your business. The Middle East is one of the expanding aerospace markets, with Dubai serving as its hub. Exhibit at the Dubai Airshow to capitalize on this expansion while avoiding the negative growth of traditional markets.

WHAT TO EXPECT AT THE 2021 DUBAI AIRSHOW:

Over a dozen country pavilions showcasing the latest cutting-edge products and technologies. Delegations of senior military and government officials from 90 nations

Over a hundred of the world's most modern commercial, private, and military aircraft are on show. At the Dubai Airshow, new features such as the Tech Zone and Vista - the new startup Launchpad have been added.

Airshow Organisers

Tarsus F&E organizes the bi-annual event under the patronage of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President, Prime Minister of the UAE, Ruler of Dubai, and UAE Minister of Defence, with the support of the Dubai Civil Aviation

Authority, Dubai Airports, the UAE Ministry of Defence, and Dubai Aviation Engineering Projects, and in collaboration with the UAE Armed Forces.

Business prospects with the Middle East

Exhibiting at the Dubai Airshow allows you to connect with the area and meet all of your Middle Eastern clients in one location. Most importantly, exhibit at the Dubai Airshow to conduct business. Listen to Tom Kallman explain how the UAE's strategic geographic situation facilitates interaction with the Middle East.

Featuring never-before-seen features, a fascinating display of the most sophisticated aircraft, and unrivalled networking possibilities, the show is jam-packed with never-before-seen features, a riveting exhibition of the most advanced aircraft, and unrivalled networking opportunities. Dubai Airshow is the year's only live and in-person aerospace

Dubai Airshow 2021, the only global airshow in 2019, is expected to be the most exciting edition yet, with world-class products from market leaders

and disruptors, expanded networking possibilities, and state-of-the-art aircraft on display, well as key industry announcements.

Show & its showcase

It also announced a series of free conferences involving 150+ industry professionals who will discuss vital insights and trends across nine themes, including cargo, sustainability, technology, and space.

The Dubai Airshow, now in its 17th year, has established itself as the premier gathering place for aerospace professionals to see the most cutting-edge technologies and solutions, as well as a variety of fascinating features and thought-leadership conferences.

By attending the Dubai Airshow, you will be joining a global community of trailblazers, market disruptors, and aviation specialists who are pushing the limits of aviation. They will help you understand what is new for the Dubai Airshow 2021 and how it will benefit your company and the aerospace industry

Cargo services

Cargo Connect is back to Dubai Airshow

with a two-day conference to meet the growing need for cargo services. Learn about the technology that can help you manage capacity changes, expedite freight dispatch, and increase safety throughout the supply chain.

With rising freight demand, safety and speed issues are becoming more prevalent, and businesses worldwide are developing innovative technology to mitigate capacity changes.

Leading specialists will assemble once again in November for a two-day conference to discuss the future of the air cargo business.

Throughout the pandemic, the value of efficient, rapid, and safe cargo has been paramount. This high-level keynote lecture will explain the genuine obstacles to sustaining effective operations and the newly discovered global cargo potential.

VISTA

For its 17th season, the show has a number of exciting new features planned. For starters, there will be a brand-new mini-show called VISTA that will focus just on entrepreneurs. This is to showcase cutting-



edge innovations in aerospace and defense industries, as well as play a role in driving the future of these industries.

A unique event dubbed VISTA will debut at the Dubai Airshow 2021, providing entrepreneurs with mentorship programs and opportunities to engage with key decision-makers and globally rated investors to establish, grow, and scale their businesses. Investment in aeronautical companies hit approximately \$1 billion in 2019.

You can be a part of VISTA if you want to launch a product or solution, elevate your brand, generate leads, learn from mentors, get media coverage, or meet with aviation industry professionals.

New services and activations will debut across the show floor at the Dubai Airshow 2021, making business networking and market intelligence more approachable than ever before.

Technology to improve industry reliability

This Technology Showcase feature will serve as a demonstration platform for cutting-

edge technology such as 5G, cyber security, artificial intelligence (AI), and automation. Join us at Dubai Airshow 2021, where we will provide you with a specialized platform to present your latest innovative technologies to qualified customers from the international aerospace and defence industries.

The importance of sustainability has never been greater. Join aircraft manufacturers, airline operators, airports, and suppliers in a collaborative effort to learn how to rebuild better and smarter airplanes. This year's Global Air Traffic Management conference will be held in person at the Dubai Airshow, following the success of the previous three years. In this new era, ANSPs and CAAs will meet at GATM to discuss shared challenges, solutions, and contingencies.

Airshow creates new business prospects

Meet with aerospace quality buyers and decision-makers from major business units such as:

1. Information and Communication
2. Technology.

3. Transformation to the Digital
4. Creativity
5. Development & Research Networking
6. Communication Infrastructure & Management
7. Artificial Intelligence,
8. Machine Learning
9. Information Science/Management

Soundproof room to relax and view flight display

Unique soundproofed, air-conditioned room chambers with good views of flying shows would be provided for "luxury networking." Anyone who has been at a meeting while a fighter jet roars by understands the importance of soundproofing.

Relax in the arena, which will showcase the latest in robot technology and music and entertainment throughout the day. Last but not least, the event will have a digital cafe where robots will take your order and make your drink to demonstrate the most recent breakthroughs in robotics and automation

Sustainability in the Aviation Industry

Will the aircraft sector be able to make a





business case for long-term viability in the aftermath of a pandemic? Achieve net-zero emissions by 2030?

The importance of sustainability has never been greater. Join aircraft manufacturers, airline operators, airports, and suppliers in a collaborative effort to learn how to rebuild better and smarter airplanes.

Aerial Mobility at its Finest

Bye-bye to traffic congestion and hello to enhanced airborne mobility!

This is your chance to learn more about the new opportunities that disruptive technologies are bringing to the transportation of cargo and people, from drone deliveries to air taxis. Discover the future of urban air mobility with world-class UAV and eVTOL developers.

This panel will examine the genuine promise of drone technology and how we can anticipate regulatory difficulties to avoid implementation delays. With increased interest in drone technology, how can stakeholders pressure regulators to accelerate the pace of regulatory change to keep up with demand?

Creating favourable conditions for innovation, facilitating effective government, and ensuring security and safety.

Space Forum

This year's Space Forum will provide attendees with an opportunity to learn more about how new data services are revolutionizing passenger experiences, how satellite connectivity is changing everything from entertainment to maintenance, and how low-cost access to space will enable your company to utilize space technology truly.

Cyber Security - Tech Xplore

The aviation digital world is constantly expanding, making it more difficult to manage risk and obtain insight into possible risks. The increased operational efficiency associated with the deployment of future technologies such as AI, 5G, and automation also exposes aviation systems to a slew of sophisticated cyber-attacks.

The Cyber Security in Aviation Conference at the Dubai Air Show 2021 will bring together industry experts and thought leaders to collaborate and explore solutions

to the most pressing cyber security concerns.

The importance of health and safety is crucial

While vaccination rates are increasing worldwide, COVID-19 is, obviously, still on everyone's mind. With this in mind, the airshow may appear to be a little different from what you may expect.

While this could alter before the present, rules require guests to register ahead of time and print their credentials before arriving. There will be no registration

available on-site.

Dubai has emerged as a global example for staging live events, further bolstering the emirate's reputation as an international events hub. The management prepared to put the safety and well-being of participants above anything else.

Airshow Conclave 2021

The Dubai Airshow conference, which will take place over four stages, will have nine tracks with some of the most well-known speakers and companies in the aviation industry.

Dubai Airshow gives you a series of thought-leadership conferences centred on current and future aerospace trends, all of which are backed by prominent aerospace experts and practitioners. The Dubai Airshow in 2021 is expected to be even larger and better than this year's event, based on the number of new countries and exhibitors that participated this year. International leaders and specialists from all over the world are being welcomed into the United States, preparing the way for future growth and recovery.



Blue Dart reports Rs 122 crore net profit in first-half

Mumbai-based Blue Dart Express, an express air and integrated transportation and distribution company, reported a 55 percent increase in consolidated revenue from operations at Rs 1,990 crore for six months ended September 30, 2021, compared to Rs 1,283 crore in H1FY2021.

Net profit came in at Rs 122 crore as against a loss of Rs 84 crore in H1FY2021. Blue Dart carried 11.6 crore shipments weighing 422,933 tonnes during H1. Consolidated revenue from operations during Q2FY2022 increased 30 percent to Rs 1,124 crore and net profit was up 114 percent to Rs 90 crore.

"The company witnessed strong pullback in demand during the quarter as wave II of

pandemic started slowing down," Balfour Manuel, managing director, Blue Dart said. "All economic indicators like GDP growth, Index for Industrial Production, GST collections etc. reflected strong recovery. Growth during the quarter is testimony to heightened business activities of key industrial verticals."

Blue Dart Aviation purchased one more leased aircraft during the second quarter "in its pursuit of improving efficiency to create value for stakeholders."

The company successfully launched the Blue Dart Med-Express Consortium to leverage the use of drones for providing a robust healthcare infrastructure to the interiors of

the nation.

"Pandemic during last quarter created an unprecedented situation in the country. Without much bothering about adverse situations, Blue Darters played a vital role in reaching medicines, testing equipment and other emergency material which was highly appreciated by the customers. To appreciate their efforts, the company has proposed a token ex-gratia payment of ₹300 equivalent in rupee term to all employees except senior management. A cost of Rs 35.95 crore towards ex-gratia has been recognised in the current quarter financials as exceptional item," the statement said.

Turkish Cargo completes 25 years of transporting medical goods

Turkish Cargo, one of the strongest cargo flight networks, contributes its strength to Turkey's medical exports. Flag carrier air cargo brand has been carrying Turkey's medicine and medical products to over 50 countries in five continents for over 25 years.

In the nuclear medicine sector, Turkish Cargo plays an important role for cancer patients transporting high quality diagnosis and treatment products in Turkey and abroad. Flag carrier air cargo brand carries

radioactive cancer diagnosis medicine used in the treatment of cancer and tumors to Germany, Colombia, India, Algeria, Taiwan and all around the world. With 8 percent market share in medical transportation, national brand gives hope to cancer patients by providing fast and safe transportation for radioactive medicine with half-life, which are produced at night by Eczacibasi-Monrol.

Eczacibasi-Monrol Nuclear Products General Manager Aydin Kucuk stated; "Our mission

as Eczacibasi-Monrol is to benefit human lives with innovative and pioneering approaches when it comes to diagnosis and treatment of life-threatening illnesses. As Turkey's first radiopharmaceutical manufacturer, we are one of the significant producers of nuclear medicine for cancer treatment in the world and we export our products to over 50 countries. With this in mind, Turkish Cargo is one of our strongest supporters since 1995 with its speed, operational quality and wide transportation network."



Lufthansa Cargo's final MD-11F arrived in Frankfurt, bringing an end to the group's tri-jet era.

The final Lufthansa Cargo MD-11 touched down at Frankfurt Airport local time, flight LH8161 from New York (JFK) landed on runway 07R ahead of schedule. Lufthansa Cargo ended a 23-year commercial operation run with the three-engine McDonnell Douglas MD-11F aircraft type. In addition to being the final European-registered MD-11F, D-ALCC will be sold to an American freight carrier.

A third MD-11 freighter (registered D-ALCC) joined the fleet in August 1998 after Lufthansa Cargo received its first two

aircraft (previous registrations D-ALCA and D-ALCB). Lufthansa Cargo used 19 MD-11s, including the final two ever built (former registration D-ALCN, serial number 48806, delivered 25 January 2001) and the last two ever delivered (former registration D-ALCM, serial number 48805, delivered 22 February 2001).

The MD-11 cargo plane has a length of 61.4 meters, a wingspan of 51.7 meters, and a maximum height of 18 meters. Cargo capacity is up to 94.7 tonnes, split into 26 places on the main deck and up

to 14 additional positions on the lower deck. Three General Electric CF6-80C2D1F jet engines propelled Lufthansa Cargo's freighters with a combined standard thrust of 273.57 kN. This airplane could fly 7,242 miles on a single fuel tank because of its large takeoff weight (MTOW) and long range (range).

The twin-engine Boeing 777 freighters, which are significantly quieter and emit less pollutants, have gradually replaced Lufthansa Cargo's MD-11F freighters from November 2013.

Dnata Enhances Cargo Services with Innovative Drone Technology

Dnata continues to invest in cutting-edge technologies to maximise efficiency and deliver the highest value for its customers. The company has partnered with Gather AI, a US-based technology start-up, and launched autonomous drones in its warehouses at Dallas Fort Worth International Airport (DFW) in the USA, to digitise acceptance and warehouse inventory processes by monitoring shipments with 99.8% accuracy.

Gather AI's innovative software enables the drones to map the environment, collect inventory data, count cases, measure temperature, and read barcodes using only their cameras, without the need for any additional active infrastructure. The drones are paired to a tablet device providing live inventory data. The collected data can be viewed directly on the tablet or the web, via a user-friendly application.

The drones can operate at temperatures as low as -10 Celsius degrees, enabling dnata to take advantage of the technology in its state-of-the-art cool chain facilities, too. Dnata plans to gradually roll out the drones across its global cargo network in the next years.

Guillaume Crozier, dnata's Divisional Vice President for Operations and Product Development, said: "We are excited to introduce leading-edge drone technology in our operations to take cargo handling to the next level.

Our partner's autonomous drones and inventory management platform provides greater transparency across our entire operations. This new technology, combined with our strong cargo product expertise, enables us to significantly enhance efficiency and mitigate the risk of revenue leakage throughout the customer journey.

"We continue to adopt the latest technologies to deliver world-class value for our partners at every stage of the cargo handling process."

Sankalp Arora, Gather AI's Co-Founder and Chief Robotics Engineer, said: "Our drones gather label reads, inventory counts, temperature and volumetric data using AI, providing traceability across operations while providing exceptions against the facility inventory software. This transparency coupled with near-real-time visibility brings the power of analytics to physical spaces, minimizing revenue leakage while helping develop trust across operations.

"However, it is dnata's dedication to bringing this transparency to their customers, combined with their insights in the air cargo industry that has been critical in applying our technology to the air cargo sector with a compelling ROI."

FedEx Express to Invest More Than SAR 1.5 Billion in Saudi Arabia

FedEx Express the world's largest express transportation company, has announced its transition to a direct-serve presence in the Kingdom of Saudi Arabia to meet the country's growing international shipping demands. The company will invest more than SAR 1.5 billion (US \$400 million) into the Saudi economy over the next 10 years through talent management and local operations and infrastructure. This investment will reaffirm the company's commitment to the country's non-oil economic growth, in line with Saudi Arabia's Vision 2030 goals, and the 'National Industrial Development and Logistics Program' which seeks to increase non-oil exports to more than SAR 1 trillion (approximately US \$266 billion)

FedEx Express has been facilitating trade in Saudi Arabia since 1994, offering international solutions and connectivity through local service providers, most recently through SAB Express. Today's announcement and the company's direct presence in the country will further help local businesses trade with ease and expand their reach into the more than 220 countries and territories FedEx serves.

Jack Muhs, regional president of FedEx Express Middle East, Indian Subcontinent, and Africa said, "Our customers will be able to take advantage of FedEx digital tools and a wider service portfolio. This strategic expansion in the Kingdom will help Saudi-based businesses connect to new markets and customers around the world,

supporting Saudi Arabia's Vision 2030 goals to diversify the national economy."

"In addition to our commitment to the Saudi economy, we see FedEx Express playing an important role in developing the small and medium enterprise environment in Saudi Arabia, which forms the backbone of the economy, and represents 99% of Saudi Arabia's private sector," continued Muhs.



BLR Airport leads as No.1 Indian Airport for perishable shipments

Kempegowda International Airport, Bengaluru (BLR Airport) has emerged as the No.1 Airport in the country for perishable shipments as Agricultural and Processed Food Products Export Development Authority (APEDA) reported that BLR Airport has processed 48,130 metric tonnes of perishables in the financial year 2020-21, accounting for 31 percent of India's total perishable shipments.

In the process, BLR Airport has emerged as the leading Airport for exports of poultry products and flowers during the same period. It processed 28,182 Metric Tonnes (MT) of poultry products and 1,296 MT of flowers. The perishables, which also included vegetables and fruits, was carried by 24 airlines to 46 international destinations. Doha was the top destination, followed by Singapore, London and Muscat.

BLR Airport has a dedicated cold zone- AISATS Coolport - with the capacity to handle 40,000 MT per annum and temperature zones ranging from -25 to +25 degrees Centigrade under the same roof. Additionally, Menzies Aviation Bobba Bangalore too has a cold zone, with a capacity of 20,000 MT per annum, and also the capability to handle 20

Unit Load Device (ULD) Pallets from 15 to 25 degrees Centigrade and 2 ULD for 2 to 8 degrees Centigrade.

Currently, 14 dedicated freighters operate to and from BLR Airport, and there is also additional belly capacity in passenger aircraft. On an average, BLR Airport has 30-33 daily freighter movements.

The current cargo capacity of BLR Airport is 715,000 Metric Tonnes (MT) annually, which is the largest cargo processing capacity in South India. This is expandable up to 850,000 MT. BIAL aims to expand its cargo infrastructure to provide a capacity of approx. 1.5 Million MT by mid-2030's.

"The round-the-clock support from Indian Customs, Plant Quarantine office Bangalore, APEDA and Karnataka State Agricultural Produce Processing and Export Corporation (KAPPEC), government of Karnataka, has facilitated in creating a robust business environment, helping BLR Airport achieve this milestone," reads the release.

Satyaki Raghunath, chief strategy and development officer, BIAL, said, "Our cargo infrastructure, powered with technology, provides rapid distribution of perishable cargo,

making BLR Airport the preferred cargo airport in South India. Our aim is to create an environment that enables our cargo partners to introduce new initiatives and facilities that cater to constantly evolving demand."

Dr. M. Angamuthu, chairman, APEDA, said, "We are collaborating with airports, exporters and stakeholders to upgrade the cold-chain infrastructure which will further improve in the quality of produce. We are delighted to see that BLR Airport is becoming a preferred cargo airport for agricultural exporters not only from within Karnataka but also from across South India."

"During the pandemic," BLR Airport informed that it "facilitated discussions between the trade and statutory bodies from both government of India (GOI) and government of Karnataka in a common forum to discuss the policies and benefits of schemes like Krishi Udaan from GOI for the perishable sector. This resulted in creation of new markets for farmers, which was essential to ensure that the farm produce could reach consumers in far-flung areas in a timely manner."

ULD sharing platform skypooling can save 25,000 tons of CO2 annually

The aviation industry is getting more involved in the environmental sustainability. Jettainer is become the solution for long-term and complex alternative drive and fuel solutions with its sharing platform skypooling that can currently make annual savings of around 25,000 tons of CO2 by avoiding unnecessary deadhead ULD (Unit Load Device) flights.

This no-cost platform allows airline controllers to share ULDs around the globe. Skypooling helps avoid deadhead flights, reducing global aviation's fuel use, costs, and CO2 emissions.

Taking a more deliberate approach to ULDs as a resource has massive potential to make aviation more sustainable. Avoiding just one customary AKE container from going on an intercontinental flight empty can save an average of 65 kilograms of CO2. The savings

are as high as roughly 3,000 kilograms for a stack of pallets.

Jettainer's managing director, Thomas Sonntag, said, "The time to make significant CO2 savings is now. As the ULD partner for many airlines, we think it is our responsibility to show ways that we can get there. Our relatively new platform is already making an important contribution in this regard by using resources more responsibly. We want to get handling agents and airports involved much more in the future so that we can achieve even more together and help make aviation more sustainable."

More than 50 airlines at more than 250 stations around the globe already use the platform, helping to make ULD use more sustainable. This approach can currently save roughly 25,000 tons of CO2 annually. By way of comparison, around 2.5 million

trees would be needed to capture a similar amount of CO2.

The platform has already been nominated twice for the TIACA Sustainability Award in recognition of its sustainable and smart approach. Along with skypooling, Jettainer is also working in other areas of the ULD business to improve sustainability and avoid emissions.



Etihad Cargo expands its African footprint with Astral Aviation and Kenya Airways

Etihad Cargo announces its new partnership with Astral Aviation and Kenya Airways with an aim to expand its pharma sector reach in Africa. The companies have signed a Service Legal Agreement (SLA) to provide reliable and cost-effective airfreight solutions across the continent. Operating a fleet of 14 freighters out of its Nairobi and Johannesburg hub, Astral Aviation services a network of 15 African destinations, which Etihad Cargo will leverage for increased vaccine distribution across Africa. Both carriers are members of The International Air Cargo Association (TIACA) and Pharma. Aero, whose joint Project Sunrays initiative offers cross-industry collaboration for pharma shippers managing complex vaccine distribution logistics.

The SLA, a first Pharma Interline agreement, ensures Etihad Cargo partners are fully compliant with latest GDP and IATA Pharma regulations and standards, and guarantees processes, from booking to handling of such sensitive goods, are standardised and performed to the highest quality.

"In addition to significantly expanding

Etihad Cargo's reach across Africa, this inter-airline agreement ensures complete adherence to the specific requirements of pharmaceutical product transportation. Customers can be reassured that Etihad Cargo partners will expertly maintain cool chain integrity," explained Martin Drew, senior vice president sales and cargo, Etihad Aviation Group.

Etihad Cargo defined the steps and responsibilities of the SLA to ease the transfer between the two airlines, boost transparency and make sure pharma specific documentation, labelling and messaging are used and shared under a precise order and form.

"We are honoured to partner with Etihad Cargo and participate in the critical distribution of Covid-19 vaccines to and within Africa. The equitable access and distribution of Covid-19 vaccines in Africa will be enhanced with the help of partnerships and collaborations within the aviation sector, such as the one enacted between Etihad Cargo and Astral, which will offer one-stop solution for the vaccines to

and within Africa," said Sanjeev Gadhia, CEO of Astral Aviation.

"Kenya Airways Cargo is excited to join Etihad Cargo in the HOPE Consortium initiative through providing logistical solutions in our home continent. With only 2.5 per cent of the African continent vaccinated against Covid-19, this will go a long way toward achieving the Africa Centre for Disease Control and prevention (CDC) to vaccinate 60 per cent of the population by the end of 2022 which will result in. This is a fundamental need and pre-requisite toward aviation recovery in Africa," commented Peter Musola, Head of Cargo Commercial at Kenya Airways.

"The World Health Organisation has recently reported that only 2.5 per cent of African citizens are vaccinated against Covid-19 and that millions more doses are required to meet even modest targets," explained Drew. "Through Etihad Cargo's ever-expanding portfolio of partnerships and collaborations, the HOPE Consortium can play a greater role in meeting vaccine demand."

SAEINDIA's Urban Air Mobility (UAM) 2021 Symposium – from Fiction to Reality



SAEINDIA organized the first symposium on Unmanned Aerial Vehicles – UAM 2021 on Sep. 16th and 17th virtually. Mrs. Rashmi Urdhwarsh, President - SAEINDIA and Former Director ARAI, welcomed the gathering. Dr Arunkumar Sampath, Chair – Meetings & Exposition Board, set the context for the event and the growing importance of Drones and Aerial Mobility.

Hon'ble Minister of Civil Aviation, Shri Jyotiraditya M. Scindia was the Chief Guest. Mr. Scindia started his talk, saying how far we have come in the realm of things, to see what we have read and seen as science fiction and futuristic ideas becoming a reality in our generation. The well attended event and the participants in the symposium demonstrated the skills and capability in India to lead in the future as a powerful nation. The event showed how quickly we have moved in adopting technologies, from the days of the electric bulb to Moore's Law to bring about an inflection point. The law applies to every form of technology today. Microprocessors are world pervasive today, not just for computers but also for many more inventions including urban mobility.

We stand together on this UAM platform, with multiple stakeholders including the government. Our outlook has to be one of facilitation. For that, the most important thing is to be able to create an enabling ecosystem for this endeavor. The ecosystem is defined by three principles – i) flexibility, ii) policy imperatives, iii) resources, mainly financial and human capital. These three

building blocks allow any opportunity to grow from a seed into a tree.

The opportunity here is not only to emerge as a service provider for India as a market, but for the whole world. That is the size of the opportunity and the target we should move towards. The economic potential of urban mobility is significant – an economic multiplier of 3.25 and an employment multiplier of 6.1.

Mr. Scindia spoke about the three distinct pieces in the value chain of drones. The first is the hardware or the skeleton for drones. There are more than 200 startups in India in this area, with a turnover of 60 to 80 crores and growing. The industry can conservatively grow at 15x in the next 2 to 3 years. The second piece is the software, the technology that is the heart of the drone. There is a wide variety of requirements and we have not even scraped the tip of the iceberg. The tasks range from agriculture to healthcare and mining. Every task will need a different software and is a great opportunity with our engineering talent and youth power.

The third piece is important, the service delivery. Urban air mobility is a fraction of the opportunity. It can be used for the movement of perishable agricultural goods, from remote locations to the nearest mandi for farmers to get a better price. There will be lakhs of drones up in the air. With that are drone pilot opportunities, for a 10th or 12th standard students, to be certified at a drone school with a DGCA license. By 2026,

the industry is expected to grow from a nascent stage to a \$2 billion industry, at a CAGR of 15% and upward.

The government is doing its bit across the spectrum, starting with the launch of the new drone policy on August 15th 2021. It is a paradigm shift in how the government works, removing the form system and a drop in license fee. There is no license or certification required for Nano drones and non-commercial drones. Commercial drone licenses will be processed by the DGCA in 15 days. We have a digital air space map coming up.

Hon'ble Prime Minister of India sees drones as the next big revolution in India and has given the required focus. The government will play the role of a facilitator and not a regulator, to democratize aerial travel within cities. The drone taxi market will invite Potential investors. We stand at the cusp of India becoming the global drone hub by 2030. We have an opportunity to leapfrog in the travel industry. We were the followers in the telecom industry revolution in the past decade. However, we should aim to be global leaders in the drone industry. The ministry is more than happy to receive suggestions. We will be successful if we work together as a unified group, understanding and helping each other.

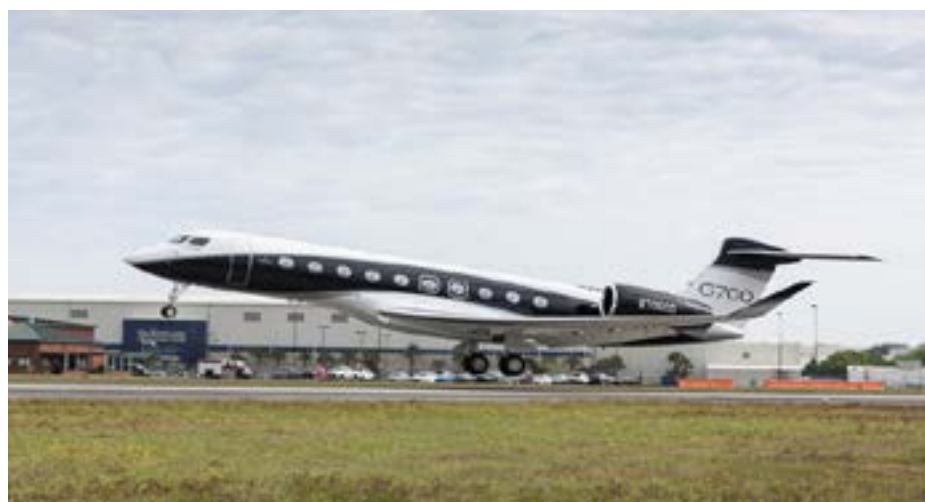


Gulfstream Aerospace Appoints Empire Aviation Group as International Sales Representative for India

Gulfstream Aerospace has appointed Empire Aviation Group — the Dubai, United Arab Emirates-based integrated private aviation specialist — as the authorized International Sales Representative (ISR) for Gulfstream business aircraft sales activities in India.

Under the agreement, Empire Aviation Group will be responsible for promoting and supporting Gulfstream with customers and prospects throughout India. The company has provided aircraft sales, aircraft management and charter management services to private aircraft owners worldwide, including India and the UAE, since launching in 2007.

“As interest in the Gulfstream family of aircraft grows throughout India, we wanted



to ensure we have local representation that not only possesses significant experience dealing with Gulfstream aircraft, but can also deliver a personal approach befitting the No. 1 brand in business aviation,” said Scott Neal, senior vice president of worldwide sales, Gulfstream. “Empire Aviation Group will provide Gulfstream with both as we continue to expand our presence in this important market.”

“Empire Aviation is honored to have been selected by Gulfstream,” added Paras P. Dhamecha, Founder and Managing Director of Empire Aviation Group. “Gulfstream offers the pinnacle of advanced business

jet design, manufacturing and customer support to represent its interests in India. We have been doing business in India since our inception and we continue to be very optimistic about the unique opportunities for private aviation in the subcontinent.»

“There’s a growing interest in aircraft acquisition and we are already working on prospective transactions in India, where we act as a trusted adviser to owners and potential buyers with a highly personalized approach,” said Dhamecha. “We will use our local presence, customer reach, experience and expertise to support Gulfstream’s success in India.”

Textron Aviation Receives Order for 20 Cessna Skyhawk Aircraft to Promote Growing Need for Pilot Training in China

Textron Aviation announced that Sichuan Longhao Flight Training Co., Ltd. (Longhao Flight Training School) in China, has signed a purchase agreement for 20 Cessna Skyhawk piston aircraft. The aircraft, which are expected to be delivered throughout 2022, will be utilized for primary pilot training in southwest and central China,

further expanding and enhancing Longhao’s training efforts. China continues to experience a growing number of licensed pilots in recent years following the General Office of the State Council’s efforts to accelerate the training and development of pilots.

“With a long-standing relationship with Longhao, this order demonstrates its support and confidence in Textron Aviation and our products,” said Mike Shih, vice president of Sales and Strategy in China, Textron Aviation. “We are pleased to be part of the efforts in China to cultivate new generations of pilots and promote the common

development of aviation under the current 14th Five-Year Plan. Flight schools in the region continue to leverage the unique strengths and capabilities of the Cessna Skyhawk to support the need of pilots in China.”

The school currently utilizes 14 Skyhawk aircraft and three flight simulators for pilot training, as well as a Cessna Citation M2 as an advanced training aircraft.



Embraer Celebrates 15-years of Executive Care Program for Business Jets

Embraer is celebrating the 15th anniversary of the Embraer Executive Care support program for business jets at the 2021 National Business Aviation Association (NBAA) annual convention and exhibition. The evolution of the Program is concentrated on digital transformation and improving the overall experience with Executive Care through improved processes and focus on relationships. Also, previously known as “EEC”, the program is now adopting its full name: Embraer Executive Care. A subtle yet significant change, the name stands for what Embraer provides to

its customers: care and support.

“Embraer Executive Care supports our goal to provide customers with the ultimate experience in business aviation. We will continue to focus on customer needs and add value to this Program to sustain the growth and retention that we have enjoyed for 15 years.” explains Marsha Woelber, Head of Worldwide Customer Support & Aftermarket Sales, and Embraer Services & Support.

Through Embraer Executive Care, the Company is constantly improving that experience; planning, budgeting and support are rolled together under a fixed monthly fee, plus an hourly charge for flight-hours flown, to make support straightforward and simple for customers to anticipate. Costs for scheduled and unscheduled maintenance items are set and known at enrollment in the program.

Covering maintenance, as well as parts, normal wear, freight, exchange, labor, and even rescue teams, and guided by Embraer’s OEM expertise and support, these can be chosen according to one of three coverage plans available that suit customer’s needs, budget, and requirements: Prime Parts, Standard and Enhanced. Throughout a five-year cycle, the benefits of the Program include actual savings compared to the costs of scheduled and unscheduled events in the same term, cutting expenditures and promoting a better experience.



Design and Technology Unite in the New Cessna Citation M2 Gen2 and Citation XLS Gen2 Business Jets

Textron Aviation, an industry leader in bringing new products and product updates to market, announced the next generation Cessna Citation M2 Gen2 and Cessna Citation XLS Gen2 business jets. Unveiled on the eve of this week’s National Business Aviation Association - Business Aviation Convention & Exhibition (NBAA-BACE), the updates to the entry-level light jet and the midsize business jet usher in the next generation of aircraft design and technology, increasing comfort and productivity for passengers and pilots.

“With the mindset that no detail is too small when shaping customer flight experiences,

we’ve touched all areas of these aircraft to create the Citation M2 Gen2 and the Citation XLS Gen2 – from cockpit to cargo area and everywhere in between,” said Christi Tannahill, senior vice president, Customer Experience. “Shaped by extensive customer feedback, the upgrades to these aircraft embody the latest in technology and design. These new models represent a significant commitment from Textron Aviation as we continue to bring best-

in-class performance and features to our customers.”

The company is now taking orders for both new models with deliveries expected to begin by the end of first quarter 2022 for the Citation M2 Gen2 and second quarter 2022 for the Citation XLS Gen2. NBAA-BACE attendees will have the opportunity to preview the new Gen2 interior mockups during the event at Textron Aviation’s static display at Henderson Executive Airport.



Honda Aircraft Company Unveils HondaJet 2600 Concept at NBAA 2021

Honda Aircraft Company unveiled the “HondaJet 2600 Concept”, at a special event hosted by Honda Aircraft Company at the 2021 NBAA Business Aviation Convention and Exhibition (NBAA-BACE). Presented as the next generation of business jet, Honda Aircraft displayed a mockup of the HondaJet 2600 Concept to collect customer feedback and validate market demand.

The HondaJet 2600 Concept inherits Honda Aircraft’s aeronautical breakthroughs, including the Over-The-Wing Engine Mount (OTWEM) configuration, Natural Laminar Flow (NLF) technology on wings and fuselage nose, and carbon composite fuselage. Through the further refinement of these foundational HondaJet technologies, the HondaJet 2600 Concept will be the world’s first light jet capable of nonstop transcontinental flight across the United States. The aircraft has a quiet and spacious cabin suited for long range travel, can seat for up to 11 occupants, and aims to deliver unparalleled fuel efficiency.

Specifications

A range of 2,625 nautical miles, being the world’s first light jet capable of nonstop transcontinental flight across the United States, and also features a high speed cruise of 450 knots and a class-leading ceiling of 47,000 feet.



Significantly more passenger space as well as a class-leading cabin tranquility with greatly reduced vibration compared to conventional light jets, due to the OTWEM configuration. The aircraft also has the tallest cabin height, and offers class-leading pressurization with a cabin altitude of 6,363 feet at its max operating altitude of 47,000 feet. Finally, the aircraft will also offer 3 types of modular and highly customizable cabin configurations.

Advanced Technology

The first transcontinental jet designed for single-pilot operation, with an advanced cockpit incorporating innovative technologies such as electrification and automated systems, including autothrottle and autobrake, among others. It will offer the utmost operational safety by reducing pilot workload through an intuitive, high-tech interface.

Fuel efficiency

Dramatically reduces carbon emissions with up to 20% better fuel efficiency than typical light jets, and is over 40% more fuel efficient than a mid-size jet during a typical mission.

When introducing the HondaJet 2600 Concept mock-up at the 2021 NBAA, Honda Aircraft Company President and CEO Michimasa Fujino stated, “Over the past five years, we introduced the HondaJet Elite, then the Elite S, to further enhance the original HondaJet design. Now, we are validating market demand as we unveil a new aircraft concept in a different segment from the original HondaJet. With the HondaJet 2600 Concept, which enables efficient transcontinental flight, offers new level of cabin comfort and capacity, and dramatically reduces CO2 emissions, we are introducing a new generation of business jets.”

Agusta is Leonardo’s new luxury brand.

Leonardo debuted the new “Agusta” branding for its AW range of VIP and business helicopters. This news came on the heels of introducing the company’s AW609 AC4 civil tilt-rotor, which was on display at Falcon Aviation Services’ “Casa Agusta,” an upmarket urban heliport terminal idea that can be replicated in numerous markets, is modular, and readily transportable.

The Casa Agusta concept, according to the company, “will support the development of a network of point-to-point connections for both urban transfers and connections between cities, while meeting growing demands for sustainable and modern vertical lift mobility, as well as greater access to urban areas, while providing VIP and charter passengers “levels of service typically available in larger private airliners.”

“With Agusta, we provide our VIP operators with a powerful brand that they can immediately recognize and identify with, a symbol that reflects their desire for perfection and quality with a personal touch and distinctiveness, including their flying experience. We want them to be themselves before departure, during flight, and when they reach their destination, distinguishing themselves from others. The power and awareness of the Agusta brand legacy live on in this market segment,” said Leonardo Helicopters managing director Gian Piero Cutillo.

INTERNATIONAL **FIRE INDIA** 2021
EXHIBITION & CONFERENCE



2nd - 4th
December 2021
India Expo Centre,
Greater Noida

15th
Edition

ORGANISED BY



CO-LOCATED EVENTS



8800490372

psrivastava@servintonline.com

9711361842

nlaroiya@servintonline.com

MEDIA PARTNERS



Email : info@fireindia.net



Website

www.fireindia.net



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



**WINGS INDIA
2022**

24th - 27th March 2022

Begumpet Airport, Sardar Patel Road, Hyderabad, India

**BOOKING
OPEN**



Event Format

- CEOs FORUM
- EXHIBITION
- STATIC DISPLAY
- GLOBAL AVIATION SUMMIT
- MEDIA CONFERENCES
- CHALETs
- AWARDS
- AIR SHOW

Exhibitor Profile

- AIRCRAFT & HELICOPTER MANUFACTURERS
- AIRCRAFT MACHINERY & EQUIPMENT COMPANIES
- AIRCRAFT INTERIORS
- AIRLINES, AIRLINE SERVICES & CARGO
- AIRPORT INFRASTRUCTURE
- DRONES
- SKILL DEVELOPMENT
- SPACE INDUSTRY



Supported by



Contact Details

Nachiket Basole

M:- +91-9867312834, +91-9833312834
Email:- nachiket.basole@ficci.com

Puneet Maithani

M:- +91-9319440030, Email:- puneet.maithani@ficci.com