

# AVIATION UPDATE

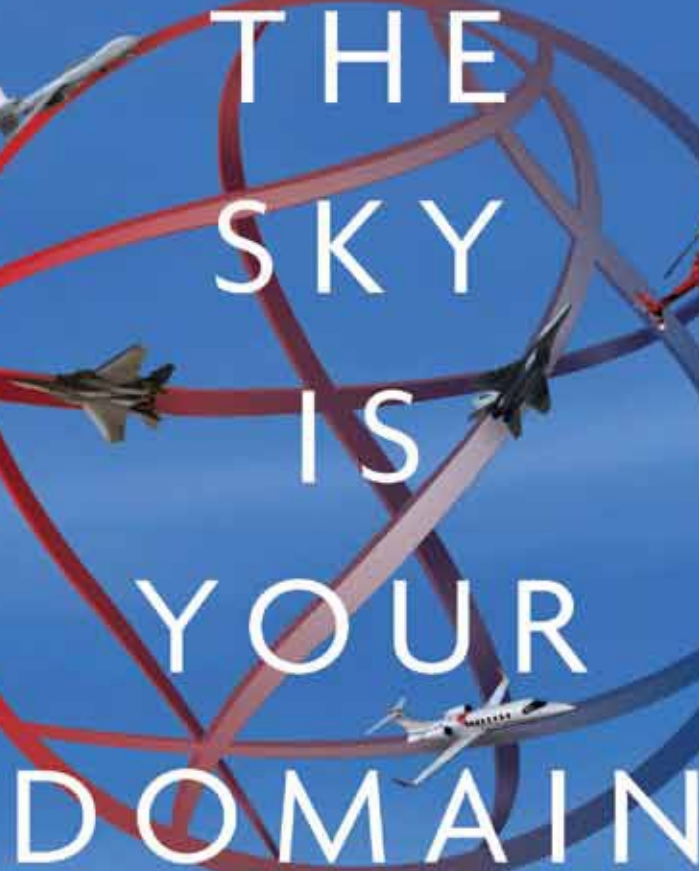


» INDIAN GOVERNMENT  
AWARDS 128  
REGIONAL ROUTES  
TO 5 AIRLINES

» AIR INDIA, CFM  
INTERNATIONAL  
LAUNCH LEAP-1A-  
POWERED A320NEO



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# AVIATION UPDATE

**Vol : 03 Issue : 9 May - 2017**

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Subscription/ Circulation

Annual Subscription: 1200 INR - 12 Issues

E-mail: subscribe@aviationupdatemagazine.com

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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



You are only limited  
by your own fears and  
inaction

Greetings and Salutations

*Dear Readers,*

This issue of aviation update has many interesting update which will motivate the readers to read from cover to cover. You will find a quick snapshot of all the updates from around the globe that is shaping the aviation sector in quick update section. You can catch more update on the same in the cargo section. The engine section has interesting information on the latest updates in the aircraft engine world.

Indian Government awards 128 regional routes to 5 airlines under regional air connectivity scheme (RCS). The five airlines awarded the rights to fly are Air India, SpiceJet, Turbo Megha, Air Odisha and Air Deccan. The scheme known as UDAN is targeting middle class travelers who want to travel between small towns in India. The airlines will connect the metropolises of Delhi, Mumbai, Bengaluru and Hyderabad with 70 smaller cities like Kanpur, Shimla, Agra, Bathinda, Pathankot, Gwalior, Ludhiana, Bhavnagar, Diu, Jamshedpur and Pondicherry. This is great news for regional flyers as they will now have more options and cheaper tickets available.

We have also increased the number of job opportunities listed in our magazine. Catch the latest opportunities existing in the aviation sector inside our pages. Some of the opportunities are exclusively available in our magazine.

We are also bringing to our readers offerings from our aviation store. We have models of all the prominent aircrafts in our store. Feel free to order through our phone line or through our mail.

Feel free to reach out to us if you have any queries related to aviation. We share the same Passion and enthusiasm that are readers have for the world of aviation

*Thanks*

**B. Kartikeya**  
Editor

## ■ INDIGO CONTINUOUS TO ENHANCE DOMESTIC CONNECTIVITY WITH ADDITION OF 18 NEW FLIGHTS



**I**ndiGo - India's largest and fastest growing low-cost carrier has announced additional flights on its domestic network. Starting June 2017, IndiGo will operate its 15th flight between Bengaluru and Delhi (to and fro), and 10th additional flight between Bengaluru and Hyderabad and Kolkata and Bengaluru (to and fro). Additionally, the airline will also operate new additional flights from Ranchi, Guwahati and Thiruvananthapuram. The new flights will provide increased frequencies on the routes and offer greater travel options to its customers.

Speaking about the latest network expansion, Mr. Aditya Ghosh, President and Whole Time Director, IndiGo, said, "We have witnessed a growing demand in the domestic sector for business and leisure travel. The additional frequencies in the summer schedule are a testament to our promise to provide enhanced connectivity in the country. It gives me immense pleasure to announce these new frequencies, which will provide even more flexibility of choice to our customers, and connect these destinations across India."

## ■ JET AIRWAYS COMMENCES INTERNATIONAL OPERATIONS FROM TERMINAL 3 (T3) AT KOCHI AIRPORT



**J**et Airways, India's full-service, premiere international airline, commenced operations from the all new state-of-the-art international Terminal 3 (T3) at Cochin International Airport (CIAL). Jet Airways' flight 9W 575, arriving at 1340 Hrs., from Abu Dhabi to Kochi became the airline's first international flight to arrive at Kochi's modern and spacious Terminal 3. Jet Airways will operate a total of 6 flights daily from the new international terminal, with services to Doha, Sharjah, Dammam, Abu Dhabi, Muscat and Dubai, providing guests superior connectivity and comfort.

As one of the largest carriers operating to/from Gulf, together with strategic partner Etihad Airways, Terminal 3 at Cochin Airport will serve as yet another international gateway in the airline's vast network. Jet Airways will provide seamless connectivity to guests from the Kerala region, looking to travel to Gulf and several destinations beyond via the airline's codeshare partners. Terminal 3 features 84 check-in counters at three check-in islands, together with 40 counters each for immigration and emigration in the Arrivals and Departure sections.

Jayaraj Shanmugam, Chief Commercial Officer, Jet Airways, said, "The new Terminal 3 of CIAL, with its well-planned facilities, will facilitate capacity expansion as well as better guest experience. We congratulate and thank the Government of Kerala, Airport Authority of India, and other stakeholders for commencing operations at the new international terminal. The terminal will provide our guests with the comfort and ease of travel while they connect to/from international destinations via Kochi. More importantly, besides boosting economic development in the region, the new terminal will offer us the opportunity to promote Kochi and neighboring regions, the seamless connectivity it offers to the world."

## ■ VISTARA INTRODUCES VISTARAPRIORITY FOR ECONOMY CLASS CUSTOMERS

**V**istara announced an optional fee-based priority handling service for its Economy Class customers. Under the scheme – termed VistaraPriority – economy passengers will get convenience of priority check-in, baggage handling, and boarding for a fee of Rs 500, said a release from the airline.

"#VistaraPriority has been designed for time-challenged discerning travellers of today who prefer travelling Economy, but demand greater convenience while travelling. Customers who purchase #VistaraPriority can check in at the Premium Economy counter, have their baggage tagged for Priority handling so that it is first off the belt, and board the aircraft ahead of other customers along with Premium Economy customers," said the release from the airline.

Customers can also purchase #VistaraPriority in advance with a 10% discount during the booking process or through "Manage My Booking" on Vistara's website. Customers can opt for the service at the airport, by paying at Vistara's airport ticket offices (ATOs) up to 60 minutes prior to departure by cash, credit/debit cards, IMPS, internet banking or a host of prepaid instruments, such as a number of cash cards and wallets, the release added.

## ■ INDIGO IS NAMED WORLD'S BEST LOW COST AIRLINE IN TRIPADVISOR'S 2017 TRAVELLERS' CHOICE AWARDS

**B**agging yet another prestigious accolade, country's largest and fastest growing carrier – IndiGo has been recognized as the World's Best Airline in the 'Low-cost category' by TripAdvisor Travellers' Choice Awards. IndiGo is also the only airline

(among both low cost and full service) from India to reach Asia Pacific level in this award category.

In its first annual Travellers' Choice Awards for Airlines, TripAdvisor recognised service and hospitality sector based on overall reviews by passengers and aggregators on the services. Airlines was one of the four travel categories identified for the Traveller's Choice Awards and the winners were decided on the basis of an algorithm that assessed the quantity and quality of airline reviews and ratings submitted by travellers worldwide over a period of 12 months. Over 50 airlines were honoured from all over the world.

Commenting on the occasion, Mr. Aditya Ghosh, President and Whole-Time Director, IndiGo said, "We are delighted to receive this recognition. The award is a testimony to the continued support and trust of our flyers. Ten years ago, when we flew our first aircraft, we aimed to redefine air travel in India by making low fare flights the first choice of travellers. We are happy that our passengers have consistently chosen to fly with us; and that inspires us to strive harder every day."

**■ JET AIRWAYS STARTS 42 NEW WEEKLY FLIGHTS**



**J**et Airways will add 42 weekly flights connecting three new city pairs as part of strengthening its domestic network to meet growing demand between metros and emerging cities. Introduction of additional frequencies and wide-body deployments between key metros will also boost capacity on existing sectors this summer as the airline bolsters its already extensive network to meet an expected surge in demand during the holiday season.

The carrier will commence operations between Nagpur and New Delhi, Lucknow and Kolkata, and Kozhikode and Bengaluru as part of its broader strategy of connecting

India's emerging tier II cities with India's metros via direct flights. It will also introduce additional frequencies on the highly traveled Delhi – Amritsar and Mumbai – Kolkata sectors and boost capacity on the New Delhi – Bengaluru and New Delhi – Bhopal routes with the introduction of the wide-body Airbus A330 and Boeing 737 services, respectively.

The changes are a part of Jet Airways' summer schedule which will see the airline operate upto 650 flights per day connecting 65 destinations in India and abroad. Jayaraj Shanmugam, Chief Commercial Officer, Jet Airways, said, "Our summer schedule has been meticulously planned to meet the expected surge in demand over the holidays. New flights, additional frequencies, greater capacity including the introduction of wide-body services across more sectors are meant to offer our discerning guests greater choice, convenience, connectivity and added comfort."

**■ INDIAN GOVERNMENT AWARDS 128 REGIONAL ROUTES TO 5 AIRLINES**

**T**he Indian regional air connectivity scheme (RCS) will be applied in May 2017, as the Ministry of Aviation has authorized five national carriers to operate 128 regional routes, Livemint reports. The five airlines awarded the rights to fly are Air India, SpiceJet, Turbo Megha, Air Odisha and Air Deccan.

The scheme known as UDAN is targeting middle class travelers who want to travel between small towns in India. The airlines will connect the metropolises of Delhi, Mumbai, Bengaluru and Hyderabad with 70 smaller cities like Kanpur, Shimla, Agra, Bathinda, Pathankot, Gwalior, Ludhiana, Bhavnagar, Diu, Jamshedpur and Puducherry.

The government's big plan

The government will subsidize nearly 50% of seats on UDAN flights, covered in an hour. The seats will be sold at about Rs2,500 (\$38.5). Junior Aviation Minister Jayant Sinha said that in this phase, the subsidy will be

about Rs200 crore (\$30.78 million), adding that it was reasonable giving the airline industry's annual revenue of Rs80,000 crore (\$12.31 billion).

Previously India had decided to construct secondary airports in the cities where primary airports are reaching or have reached maximum capacity. The secondary airports would mainly service regional routes.

"That is a very valid suggestion," Anil Srivastava, joint secretary at Civil Aviation Ministry said at Economic Times Global Business Summit. "We are thinking about it, as Airports Authority of India (AAI) has its hands full. The management of Ahmedabad and Jaipur airports are being awarded under public-private partnership (PPP). The line of thinking is there but nothing is concrete as of now."

The scheme, which would be in operation for a period of 10 years, is mainly aimed to provide connectivity to un-served and under-served regions of the country by reviving of existing air-strips and airports.

**■ AIR INDIA, CFM INTERNATIONAL LAUNCH LEAP-1A-POWERED A320NEO**



**A**ir India and CFM International announced the delivery and entry into service of the airline's first LEAP-1A-powered A320neo aircraft, of which one of the jet engines is the 100th LEAP-1A production.

The airline completed its first commercial flight on the 24th of February 2017, carrying 161 passengers from Delhi to Chennai. Air India has taken delivery of three leased aircraft to date and is scheduled to induct a total of 14 A320neos this year.

"Air India congratulates CFM for crossing the 100-engine production mark in a short span of time. With the induction of more

efficient LEAP – 1A powered A320neos, Air India hopes to achieve improved economies of scale,” said Ashwani Lohani, Chairman and Managing Director of Air India.

According to CFM, Air India has been a CFM customer since 2002, when the airline began operating Airbus A320ceo aircraft powered by CFM56-5B engines. Today, the airline has a fleet of 51 aircraft in operation and has achieved more than 3.5 million flight hours with its CFM56 engines.

“We are very proud of the partnership we have with Air India,” said Gaël Méheust, CFM president and CEO. “It has been an honor to be a part of this team and support them in the important role this airline has played in the economic development of India. Congratulations to everyone at Air India; we look forward the next chapter of this relationship with great anticipation.”

The LEAP-1A-powered A320neo entered commercial service in August 2016 and ten airlines have taken delivery to date. LEAP-1A engines are a product of CFM International, a 50/50 joint company between GE and Safran Aircraft Engines. To date, the company has garnered orders and commitments for more than 12,200 LEAP engines, making it the fastest-selling engine in the company’s history.

The flag carrier of India now operates a fleet of 118 aircraft and serves a total of 91 destinations including 52 domestic destinations and 39 international destinations in 27 countries.

■ **MAHARASHTRA TOURISM SIGNS MOU WITH ETIHAD & JET AIRWAYS TO PROMOTE TOURISM**

Maharashtra Tourism signed Memorandum of Understanding (MoU) with Etihad and Jet Airways, aiming to boost tourism by attracting more visitors to the state and leveraging the airline’s expanding international network.

Valsa Nair Singh, Principal Secretary, Tourism & Culture, Government of Maharashtra, signed MoU with Neerja Bhatia,

Regional General Manager of Etihad Airways and Jayaraj Shanmugum, Chief Commercial Officer of Jet Airways in the presence of Devendra Fadnavis, Chief Minister; Jaykumar Rawal, Minister of Tourism, Government of Maharashtra, Dr. K.H. Govinda Raj, Managing Director of MTDC among others.

This partnership will mean cooperation in a number of marketing activities such as inflight magazine promotion, website promotion as well as advertising and digital campaigns to promote Maharashtra as a leisure destination. Both the aviation groups would also help provide information to its users on less-explored but high potential destinations in Maharashtra for a memorable travel experience. This association will help expose visitors to Maharashtra’s rich culture and will play a key role in highlighting Maharashtra Tourism’s efforts to diversify tourism products to cater to the passions of growing travelers.

Commenting on the association, Rawal, Minister of Tourism, Government of Maharashtra stated, “We are honoured to welcome this opportunity to strengthen our cooperation with Etihad & Jet Aviation Group. This MoU is the beginning of a strategic partnership with two of the leading and most important international airlines to attract as many international tourists as possible. Together we can create benefits for travellers and shareholders. Our aim is to jointly put in place the best strategies and practices to increase Maharashtra’s marketing footprint and position it as the most preferred destination.”

“We’re delighted to further strengthen our relationship with Etihad & Jet Airways. This is a landmark agreement that will provide valuable support for Maharashtra Tourism’s global campaigns and marketing activities, as well as some of the industry’s most important trade and business events. This unique and important partnership between Maharashtra Tourism, Etihad & Jet Airways will boost the state’s image exponentially,” said Valsa Nair.

■ **VISTARA NOW BREWS STARBUCKS COFFEE AT 30,000 FEET**



Vistara has elevated its in-flight service to new heights by offering Starbucks® India Estates Blend coffee on its flights. This special blend of Starbucks coffee will be available on-board Vistara to customers in Business Class and Premium Economy. This makes Vistara the first airline in South Asia as well as Southeast Asia to offer this service, made possible by the exclusive partnership in India with Starbucks, the premier roaster and retailer of specialty coffee in the world.

Vistara will freshly brew Starbucks® India Estates Blend, a medium roast coffee sourced from the estates of Coorg and Chickmagalur, at 30,000 feet to offer customers an extraordinary in-flight experience. Comprehensive consumer research revealed that the discerning air travellers of today expect finer details in their flying experience, including the coffee they sip amid clouds. Travellers are increasingly expecting the fine dining experience on their flights that they would at their favorite restaurant or coffeehouse. In its promise of being ‘intuitively thoughtful’, Vistara introduced this first-of-its-kind service, which will delight millions of such travellers and forever change the definition of in-flight meal service in domestic skies.

Commenting on the launch of this service, Phee Teik Yeoh, CEO, Vistara, said, “Coffee is not just a beverage; it is a way of life for many people. Vistara aims to transform the flying experience in India forever. Our partnership with Starbucks is a step in that direction, reflecting our focus on the evolving preferences of our customers. We genuinely believe that such exclusivity in our service affirms our promise of making flying a ‘new feeling’.”

Sumitro Ghosh, CEO, Tata Starbucks Private Ltd. said, “We are delighted to partner with Vistara to provide freshly brewed Starbucks® India Estates Blend to Vistara passengers. This partnership allows us to take forward a joint commitment to provide a distinctive and unparalleled customer experience”.

■ **EMBRAER SELECTS PANASONIC FOR IFE SOLUTIONS FOR E-JETS E2**



**E**mbraer announced that it has selected Panasonic Avionics Corporation (Panasonic) to provide inflight entertainment and connectivity (IFEC) for the E-Jets E2, the second generation of Embraer’s E-Jets family of commercial aircraft. The new contract extended the partnership between the two companies, with Panasonic offering now Wi-Fi Streaming Entertainment and Wi-Fi connectivity services for the E2s aircraft.

“Panasonic offered a world class solution for wireless IFE and global broadband connectivity systems aboard the E-Jets E2. The extended partnership helps us to ensure our airline customers can offer their passengers a premium experience all over the world,” said Fernando Antonio Oliveira, Embraer Director for the E-Jets E2 Program.

According to the aircraft manufacturer, the technology also offers a robust business platform for the airlines. The system will be installed in the E2 demo aircraft.

“Panasonic is proud to enhance our eight year relationship with Embraer. This latest milestone ensures that airlines can now offer passenger’s access to the industry’s leading broadband communications and wireless entertainment solutions”, said Mark Jennings, Chief Operating Officer of Panasonic Avionics Corporation.

Panasonic’s Global Communications Services, which include broadband connectivity, live television and mobile phone services, are available on over 99.6% of all air traffic routes. Embraer said that the E2 has accrued 275 firm orders, in addition to 415 options, purchase rights, and letters-of-intent, totaling 690 commitments from airline customers and leasing companies. Currently, the E-Jets are operating with about 70 customers in 50 countries.

■ **WORLD’S LARGEST AMPHIBIOUS AIRCRAFT TO HAVE ITS FLIGHT IN MAY**



**C**hina is planning to carry out the maiden flight of AG600, the world’s largest amphibious aircraft, in mid-May, Sputnik reports. In February, the Aviation Industry Corporation of China (AVIC) said that the test flight of the aircraft would be conducted in the first half of 2017, not specifying the exact date.

According to China Radio International (CRI), the aircraft designed for firefighting and rescue missions will hold the first flight over land in May, while the first water takeoff will be held in the second half of 2017. China is currently conducting tests necessary to prepare the plane for the flight, the broadcaster added.

AVIC finished manufacturing of the aircraft in July 2016 in the southern Chinese province of Guangdong. The plane has four turboprop engines and has a maximum range of some 2,800 miles.

■ **ANTONOV AN-132D TAKES FIRST FLIGHT**



**A**ntonov’s new multipurpose aircraft, the AN-132D, took to the skies for its maiden flight on the 31st of March 2017, from the company’s airfield in Kiev, Ukraine. According to the company, the first prototype of the new aircraft flew for 1 hour and 50 minutes captained by Antonov test pilot

1st class, Victor Goncharov, accompanied by test pilot General Mohammed Ayash of the Taqnia Aeronautics Company, Kingdom of Saudi Arabia, co-piloted by Antonov test pilot, 2nd class, Bohdan Zagoruyko.

The AN-132 programme is being developed following a contract with a customer from the Kingdom of Saudi Arabia (KSA) in close cooperation with King Abdulaziz City for Science and Technology (KACST) and the Taqnia Aeronautics Co.

Piotr Poroshenko, the President of Ukraine, commented on the AN-132 programme: “I am proud of my copatriots, thousands of employees of Antonov Company and other enterprises of Ukraine, who have worked and will do a lot to launch series production of this aircraft. But today the important event was happened – our aircraft rose into the sky. I saw the aircraft landing. It was well done.”

Oleksandr Kotsiuba, President of Antonov, stated that the next important step will be the presentation of the AN-132D in the Kingdom of Saudi Arabia, which will be conducted after the completion of more aircraft tests. Khaled Abdullah Alhussain, Director of the National Aerospace Technology Center of KACST, expressed confidence, that the sky of his country will meet this aircraft hospitably and will become a native for it.

Antonov said that the AN-132 multipurpose turboprop aircraft is intended for operation on short and medium-haul routes. The new aircraft will perform various tasks including the transportation of raw materials, mail and other cargo, including bulk cargo weighing up to 9.2 tonnes. The aircraft will also be deployed for emergencies, including civilian and casualty evacuation from disaster areas and airdropping paratroop rescue teams.

■ **BOEING SELECTS PLANO, TEXAS, FOR GLOBAL SERVICES HEADQUARTERS**

**B**oeing announced that it has selected a site in Plano, Texas (USA), for the headquarters of its new Global Services business unit, which will be operational in July 2017.



Boeing Global Services headquarters will be located in the Legacy West mixed-use development in West Plano. Global Services President and CEO Stan Deal, several of his leadership team members and some support staff will be located at the site, which will serve as a central hub for approximately 20,000 employees located around the globe.

“Texas continues to be a global powerhouse in business expansion and relocation because of our economic policies that encourage industry leaders, like Boeing, to expand their operations here,” said Texas Governor Greg Abbott. Boeing selected the greater Dallas area because it’s centrally located within Boeing’s U.S. footprint, has good proximity to major operations for commercial customers and defense partners, and serves as a transportation hub that will allow the company to reach customers quickly and efficiently.

“We are excited to establish the Global Services headquarters in Plano,” said Deal. “We have a fixed focus on serving our customers worldwide, and this location assists in our mission of providing uncompromising service worldwide.”

“On behalf of the city of Plano, we are thrilled to welcome an iconic 100-year- innovative company like Boeing,” said Plano Mayor Harry LaRosiliere. “Through the partnership with our city and the many amenities of Legacy West, we look forward to helping Boeing Global Services deliver on its mission.”

In November 2016, Boeing announced the standup of Global Services, which will be formed by integrating the services capabilities of the defense, space and commercial sectors into a single, customer-focused business. Operating as a third business unit of Boeing, Global Services will provide agile, cost-competitive services to commercial and defense customers worldwide.

**■ GOGO TO SUPPLY 2KU SOLUTION FOR AIRBUS HBC PROGRAM**

Gogo, the leading global provider of broadband connectivity products and services for aviation, has been selected by Airbus as a lead supplier for its High

Bandwidth Connectivity (HBC) program. The designation officially enables factory line-fit installation of Gogo’s 2Ku global satellite solution on Airbus A320 Family, A330, and A380 aircraft after successful offerability process and further system certification.

Being part of Airbus’ HBC program means airlines can place future aircraft orders with Airbus and have Gogo’s 2Ku technology installed at the factory on all major fleet types. Those aircraft are then delivered with the technology already installed and ready for service on day one.

“We are proud to be selected by Airbus as a supplier for Airbus’ high bandwidth connectivity program and look forward to working with them to provide our industry leading 2Ku solution to their customers,” Anand Chari, executive vice president and CTO at Gogo, says.

Gogo’s 2Ku technology is the most future-proof global technology for inflight connectivity and delivers streaming-video speeds to passengers. 2Ku enables a wide range of customizable experiences for Gogo’s airline partners. For passengers, it means in-flight Wi-Fi and wireless entertainment; for airlines, it means connecting flight attendants, pilots, crew, and the aircraft itself.

Currently, Gogo has more than 1500 aircraft commitments to 2Ku representing 13 commercial airlines. Most of 1500+ aircraft are set to be flying with the technology by the end of 2018.

**■ AIRBUS LAUNCHES NEW SUBSIDIARY: AIRBUS INTERIORS SERVICES**



Airbus announced that it has launched a new subsidiary, the Airbus Interiors Services (AIS). Based in Toulouse, France, AIS is dedicated to supporting airlines with

their cabin upgrade development strategies. AIS offers through an experienced team of engineers and supply chain specialists various retrofit solutions. By combining the competitiveness and reliability of manufacturer-developed solutions with the agility of bespoke creations, AIS will deliver upgrade solutions, tailored equipment and innovative products to Airbus standards.

“We are delighted to welcome AIS into the Services by Airbus family. Their offer is perfectly complementing the Airbus upgrades successful solutions,” said Laurent Martinez, Head of Services by Airbus.

According to Airbus, the new venture currently comprises three business lines to respond to airlines’ needs namely tailored equipment, upgrade solutions (cabin & connectivity) and the innovative products.

**■ CHINA’S FIRST LARGE CIVIL HELICOPTER AC313 COMPLETES TEST FLIGHT**



In the end of March 2017, Zhang Yunlei and Yuan Luogeng, two test pilots from the Chinese PLA Army Aviation Corps, have completed the last airworthiness verification item with AC313 helicopter in heavy rain, Defence-Aerospace reported. The flight was marking the successful completion of the onboard test flight and airworthiness verification of China’s first homemade large civil helicopter.

Based on the requirements of the airworthiness regulations, the test flight for airworthiness verification must be conducted in heavy rain. The helicopter was required to perform taking-off and landing under the condition that the precipitation exceeds 0.7 mm in six minutes, and high-speed traffic pattern

flight at the altitudes of 200 to 500 meters.

In order to ensure the safety, a test flight team of the PLA Army Aviation Corps made careful preparations and formulated a contingency plan. The helicopter conducted non-stop flight for one and a half hours in the rain, and the entire test flight was safe and smooth.

The results show that under the weather condition of heavy rain, the AC313 helicopter is able to fly safely with all systems and equipment in the helicopter running fine, and the test pilot has a clear visibility.

The AC313 helicopter is a large-scale civil helicopter independently developed and manufactured by Aviation Industry Corporation of China (AVIC). According to China Military, quoted by Defence-Aerospace, the research and development (R&D) process of this helicopter is in full accordance with the international airworthiness regulations and the overall performance of the helicopter has reached the international level of third generation helicopters.

■ **BOMBARDIER, TIANJIN AIRPORT OPEN BUSINESS JET SERVICE CENTER**



**B**ombardier Business Aircraft in collaboration with its partner the Tianjin Airport Economic Area (TAEA) announced the opening of Service Centre in Tianjin, China, on the 7th of April 2017. The facility uses the same processes and procedures that govern Bombardier's worldwide network of Service Centres.

Located near Beijing, the Tianjin Service Centre includes hangar space, offices, as well as back shop areas totaling over 8,500 square meters (95,766 square feet). It offers maintenance, repair, overhaul, and associated activities and services, and complements the Bombardier Business Aircraft Support

Network in Asia.

"Bombardier Business Aircraft has had the largest fleet in Asia for the last 12 years. We are thrilled to bring the expertise of our worldwide service network to support our customers in the region. This major investment, made in collaboration with TAEA, demonstrates Bombardier's commitment to strengthen its presence in China, as well as its confidence in the future of the aviation industry in the region," said Jean-Christophe Gallagher, Vice President and General Manager, Customer Experience, Bombardier Business Aircraft.

Zhao Xuesen, Vice President of Tianjin Airport Economic Area, said: "It shows the vitality of the Tianjin aviation industry and consolidates Tianjin's position as an emerging aviation hub in China. The movement of business aircraft reached 1,528 at the Tianjin Airport in 2016, a 17.36% increase from the previous year. With China's growth strategy in place, a rapid expansion of the business aviation industry can be anticipated in Tianjin, in line with China's 13th Five-Year Plan."

■ **AIRBUS A350-1000 COMPLETES NOISE TEST CAMPAIGN IN SPAIN**



**A**irbus A350-1000, MSN065 test aircraft, fitted with cabin, has completed a series of noise tests in Moron, south of Spain, between 27th March and 5th of April, as part of its type certification flight test campaign, paving the way for entry into service on schedule before year end, Airbus announced.

The aircraft, together with acoustic ground facilities around the Morón Air Force base, were equipped with instruments and sensors to measure external noise levels during take-off and landing phases of flight, as well as engine run ups. The latest

generation Rolls-Royce engines combined with aerodynamics technologies contribute to the A350-1000's reduced noise footprint.

According to Airbus, early results confirm the -1000 is very quiet, easily complying with external noise certification requirements with significant margins versus current applicable requirements (EASA CS-36 and FAA Part 36). Like its sister aircraft the -900 which is in service with 11 carriers worldwide, the A350-1000 will be a good neighbour to communities around airports. Three A350-1000 flight test aircraft (MSN059, MSN071 and MSN065) are flying in the intensive Type Certification campaign which is progressing as planned.

The A350-1000 is the latest member of the Airbus widebody family, together with the A330neo. As well as having a longer fuselage to accommodate 40 more passengers than the A350-900, the A350-1000 also features a modified wing trailing-edge, new six-wheel main landing gears and more powerful Rolls-Royce Trent XWB-97 engines.

According to Airbus, to date 12 customers from five continents have placed orders for a total of 211 A350-1000s.

■ **AIRBALTIC LAUNCHES FIRST CHARTER FLIGHTS ON CS300**



**T**he Latvian airline airBaltic and Tez Tour Latvia, a tour operator based in Latvia, have jointly launched the world's first charter flights with Bombardier CS300 aircraft. For the summer season, charter flights will connect Riga with Antalya (Turkey), Heraklion (Greece), Burgas (Bulgaria) and Rimini (Italy). airBaltic will fly several times a week to these leisure destinations.

Konstantins Palgovs, General Manager of Tez Tour Latvia: "This summer season 2017 we have planned more than 200 flights from Riga to Italy, Greece, Turkey and Bulgaria

with the modern Bombardier CS300 aircraft. All our charter flights will be operated with the latest and most comfortable airBaltic aircraft."

"We have chosen the CS300 also because it boasts lower fuel consumption, which, in comparison with other this type aircraft, is substantially lower. This means that the final price for the journey will be more competitive. In particular, it will manifest in long distance flights," added Palgova

Martin Gauss, Chief Executive Officer of airBaltic: "Thanks to Tez Tour Latvija and airBaltic long-standing and successful cooperation, people from the Baltic States can take advantage of many more direct charter flights from Riga to sunny holiday destinations."

airBaltic serves over 60 destinations from its home base in Riga, Latvia. In addition, airBaltic also offers direct flights from Tallinn (Estonia) and Vilnius (Lithuania). Its fleet consists of 26 aircraft – 3 Bombardier CS300, 11 Boeing 737 and 12 Bombardier Q400Next Gen.

■ **JAPAN AIR COMMUTER STARTS OPERATIONS WITH ATR**



Japan Airlines subsidiary Japan Air Commuter (JAC) has flown its first ATR 42-600 flight on April 26, 2017. According to ATR, JAC's flight 3741 departed from Kagoshima at 8:50 am (local time) for a 40-minute flight to Yakushima. The aircraft then performed three flights, from Yakushima to Kagoshima, from Kagoshima to Okinoerabu, and back to Kagoshima.

The entry into service of JAC's first ATR is a major milestone for ATR, for which Japan is a key market, according to the turboprop aircraft manufacturer. Japan is preparing for a huge influx of tourists. Its government hopes

to welcome 40 million visitors by 2020. In addition to hosting major events such as the Rugby World Cup in 2019 and the Olympic Games in 2020, Japan is promoting the natural beauty and cultural heritage of its regions.

ATR said that as 35% of Japanese domestic routes are below 300 nautical miles (555.6 km), ATRs are optimally suited to further develop regional connectivity as well as support the tourism in Japan.

Based in Kagoshima Airport, Japan Air Commuter operates 19 aircraft, 97 daily departures on 23 routes, and serves as the essential public air transport means for 1.6 million passengers annually between the beautiful Amami Islands and Western Japan. The airline and ATR started their partnership at the 2015 Paris Airshow, with the signature of a contract for seven ATR 42-600s.

■ **EMBRAER AND UBER SIGN FOR ELECTRIC VTOL TAXI DEVELOPMENT**



Embraer announced an agreement with the transportation network company Uber to explore the concept of an ecosystem—dubbed Uber Elevate Network—that will allow the potential development and deployment of small electric vertical take-off and landing vehicles (VTOLs) for short urban commutes. The announcement was made in Dallas, Texas (USA), in the opening session of the Uber Elevate Summit, April 25, 2017.

This preliminary partnership is a project generated by the Embraer Business Innovation Center, the new initiative based in Melbourne, Florida, with outposts in Silicon Valley and Boston.

"We firmly believe we need to explore several new business concepts that may impact air transportation in the future. This

is a unique opportunity to complement the air transport knowledge of a visionary and revolutionary ground transport company. On exercising this partnership, we will be developing new technologies, new products and new business models which could generate opportunities for Embraer in the future," said Paulo Cesar de Souza e Silva, Embraer's CEO.

"We share the vision that the state of transportation in congested cities is ripe for innovative solutions, such as on-demand aviation. Embraer's leadership roles in commercial and business aviation were attained through the introduction of disruptive aircraft and services, and we are confident that our DNA will add value to new concepts in urban transportation as well," said Antonio Campello, Vice President for Corporate Innovation.

"Embraer is the leading manufacturer of commercial jets up to 130 seats and one of Uber's most experienced partners in this space. Their knowledge of certifying fly-by-wire aircraft, and their confidence that they can similarly bring fly-by-wire technology affordably to these much smaller aircraft is an essential ingredient for our success", said Mark Moore, Uber's Director of Engineering for Aviation.

■ **AIRBUS HELICOPTERS, SINGPOST COOPERATE FOR DELIVERY DRONE SYSTEM**



Singapore, Airbus Helicopters is collaborating with Singapore Post (SingPost) as its logistics partner for the innovative Skyways parcel delivery project. The announcement was made at the inaugural Rotorcraft Asia exhibition taking place in Singapore, April 18, 2017.

Skyways is an experimental project to develop a safe and economically viable aerial unmanned parcel delivery system for use in urban environments. A MoU was signed in February 2016 between Airbus Helicopters and the Civil Aviation Authority of Singapore to conduct the Skyways proof-of-concept trial. The research and development phase is now at an advanced stage, with an initial trial phase planned at the National University of Singapore (NUS) by early 2018. This will involve the transport of small packages within the university campus.

Airbus Helicopters is the overall Skyways system architect and provider, contributing its capabilities in drone platforms as well as its concept of future parcel delivery. This concept involves systems and structures that allow drones to land, dock with secure structures, discharge or take on payloads, and then fly off to other destinations.

According to Airbus Helicopters, as the logistics partner for Skyways, SingPost will bring its expertise in software systems that control and manage delivery networks, customer-interface systems and real-time back-end links to a delivery system that serve the last mile. SingPost will also contribute its understanding of postal and eCommerce logistics trends to ensure the solutions developed will address the future logistics needs of cities around the world.

"Skyways was launched with the intent to provide highly efficient, reliable and seamless small parcel deliveries using drones in urban cities. The project has been progressing well and we welcome SingPost onboard as our logistics partner in this critical phase, as we work in tandem to develop a robust autonomous parcel delivery system that will revolutionise the logistics industry," said Airbus Helicopters' Executive Vice President of Engineering and Chief Technical Officer Jean-Brice Dumont. "A forerunner in innovation, Airbus strongly believes in improving daily lives by enhancing air mobility in urban spaces, in a safe, secure and reliable manner."

"Drones and other autonomous vehicles are in the future of the logistics industry. The demonstrator that Airbus Helicopters and SingPost will be developing is designed to address real-world challenges such as safe and accurate flight in high rise cities, while meeting the needs of customers," said Mervyn Lim, SingPost's Covering Group CEO.

"Our trial will involve SingPost's parcel locker technology, and this MoU fits well into our long term plans to develop future generations of parcel delivery points that involve drones and the vertical dimension. Together with Airbus Helicopters' technologists, SingPost's engineers will be working to ensure the concept meets the future logistics needs of urban environments like Singapore."

Skyways is one of a number of innovative Urban Air Mobility projects currently being researched at Airbus. These also include the Vahana and CityAirbus autonomous flying vehicle concepts.

**■ WESTJET PLANS TO LAUNCH ULCC**



Canada's carrier WestJet announced its intention to launch a new, ultra-low-cost carrier (ULCC) in Canada subject to agreement with its pilots and any required regulatory approvals. WestJet said that the service is expected to start in late 2017 with an initial fleet of 10 high-density Boeing 737-800s designed by the airline that first brought low-cost air travel to Canada in 1996. The ULCC will provide Canadians with no-frills, lower-cost travel options.

"We have built WestJet from its low-cost, regional roots into a renowned, international airline with service to 21 countries and today it's all about disrupting at the price-sensitive end of the market," said Clive Beddoe, co-founder of WestJet and Chair of the Board of the Directors. "Launching a ULCC will broaden WestJet's growth opportunities and open new market segments by offering more choice to those Canadians looking for lower fares."

Gregg Saretsky, WestJet President and CEO, added: "The complete unbundling of services and products in order to lower fares for the price-sensitive traveller has created the ULCC category and our new airline will provide Canadians a pro-competitive, cheap and cheerful flying experience from a

company with a proven track record."

WestJet's plan for establishing the new ULCC has got a response from Canada Jetlines (Jetlines) which also plans to launch the ULCC and now is expecting to receive the AOC. Jim Scott, CEO of Canada Jetlines, said: "We believe that what Canadians need, however, is a genuine Ultra Low-Cost Carrier and greater competition. Today's [WestJet] announcement offers nothing more than an 'airline within an airline' that will not increase competition into the market, and it remains to be seen whether it will be able to achieve the full benefits of a ULCC."

"Most 'airlines within airlines' that have attempted to offer low-cost options for air travelers have failed in North America, including Zip, Ted, Song, Metrojet, Calite, and United Shuttle. The continent is littered with the graves of these lower-cost airlines, precisely because the model doesn't work when the airline is owned by another airline," Scott added.

WestJet and its subsidiary WestJet Encore now fly to 100 destinations in 20 countries in North and Central America, the Caribbean and Europe, including 36 cities in Canada and 21 in the US. The company now operates a fleet of 119 Boeing aircraft and 33 Bombardier Q400s.

**■ MALAYSIA AIRLINES TO USE REAL-TIME GLOBAL AIRCRAFT TRACKING**



SITAONAIR, a travel company specialized in connected aircraft service, announced that Malaysia Airlines will be the first SITAONAIR airline customer to benefit from a flight-tracking partnership. Under

the agreement, all Malaysia Airlines aircraft will have access to minute-by-minute, globally, flight-tracking data, delivered by SITAONAIR's AIRCOM FlightTracker.

This solution will enhance the existing SITAONAIR AIRCOM FlightTracker by adding Aireon's space-based Automatic Dependent Surveillance-Broadcast (ADS-B) data to the existing data from FlightAware's multiple global sources, complementing active Air Navigation Service Provider (ANSP) Future Air Navigation System (FANS) activity data.

According to SITAONAIR, by incorporating this data, Malaysia Airlines' aircraft operations center will receive real-time position updates of its airborne fleet globally. Aireon's space-based ADS-B data will also resolve any existing data feed coverage gaps that remain, particularly over oceanic and remote airspace, where there is currently no surveillance.

"Real-time global aircraft tracking has long been a goal of the aviation community," said Izhm Ismail, Chief Operating Officer, Malaysia Airlines. "We are proud to be the first airline to adopt this solution using space-based ADS-B data as part of SITAONAIR's AIRCOM FlightTracker."

Paul Gibson, Portfolio Director, AIRCOM, at SITAONAIR, said: "With the addition of the AireonSM data, via FlightAware, to SITAONAIR's AIRCOM FlightTracker, combined with our active monitoring and automated alerting capabilities, Malaysia Airlines will be at the cutting-edge of real-time flight-tracking technology. With access to up-to-the-minute reporting, Malaysia Airlines will know the location, heading, speed and altitude of all aircraft in its fleet, at all times, and be alerted to any exceptions."

In November 2016, Aireon, FlightAware and SITAONAIR announced a new partnership to deliver Aireon data via FlightAware to SITAONAIR customers. FlightAware provides a combination of global air traffic control data, aircraft datalink information and terrestrial ADS-B data through a secure streaming data feed. Once the Aireon system is operational, expected in 2018, Airlines already using SITAONAIR's AIRCOM FlightTracker will automatically begin seeing the new Aireon data appear in their systems without the need for new avionics or for aircraft modifications.

## ■ RDC LAUNCHES AIRLINE PERFORMANCE ANALYSIS PLATFORM

RDC, a Europe-based aviation data analysis company, announced the launch of Airline Profitability into its online Apex platform. Powered by RDC's proprietary yield and route economics data, Airline Profitability delivers powerful insight into airline route and network profitability. The program is designed for airports to make their airline relationships more profitable.

It has always been a major challenge for an airport to understand the performance of airlines at their airport. Previously the focus of airlines has been on passenger numbers, which is more readily available, but that does not enable business development teams to tell the full story, RDC stated.

According to the company, what matters to an airline now is the sustainability of its route network, which is a combination of passenger numbers, revenue and operating costs. By combining its proprietary fare and cost data, RDC is now able to estimate airline profitability at a route level, giving airports a unique insight into the performance of their airline customers.

Adam Kendall, Online Product Manager of RDC said: "Traffic in Europe has grown strongly in the last 20 years, propelled by a low fare revolution led by Ryanair, easyJet and Wizz. To date, passenger growth has been the main way airports judge route performance, but with our new tool they will be able to understand whether their airline routes are profitable or not."

RDC said that it has been developing its online Apex platform since launching the product in 2014. Now used by over 70 airports and airlines in Europe and Asia, it is becoming a must-have tool for airport managers who need to understand how to manage and develop airline relationships.

## ■ UPGRADED AN-2 TAKES OFF FROM ANTONOV BASE WITH RECORD PAYLOAD



The An-2-100 aircraft, which is a modern modification of the An-2 biplane, took off with a record payload of 3,200 kilograms on the 12th of April. Tests are taking place at the Antonov aerodrome in the village of Hostomel (Kyiv region).

The An-2 is a multipurpose biplane that is used as an agricultural, sports, transport, and passenger aircraft. It is in service in the air forces of many countries.

With 18,000 produced, the An-2 is one of the most mass-produced aircraft in history. Its production in Poland continued until 2002. It remains in production in China. The An-2 is listed in the Guinness Book of Records as the only aircraft that has been in production for more than 60 years.

## ■ EMBRAER CELEBRATES ERJ 145'S 20 YEARS OF OPERATION



As part of the celebrations for the 20 years of commercial operation of the 50-seat ERJ 145 jet, Embraer has welcomed almost 30 operators of the jet family for the two-day Embraer Operators Conference (EOC), in Rio de Janeiro, Brazil, on the 11th to 12th of April 2017. The first commercial flight of the ERJ 145 occurred on the 6th of April 1997, with U.S. airline Continental Express.

"The ERJ 145 marked Embraer's commercial renaissance, paving the way for the development of new programs, such as the E-Jets, which moved the Company into the lead of the commercial jet market for

up to 130-seat aircraft," said Paulo Cesar de Souza e Silva, Embraer President & CEO.

According to Embraer, the ERJ 145 family of jets consists of the ERJ 145 (50 seats), the ERJ 135 (37 seats), the ERJ 140 (44 seats) and the ERJ 145 XR (long-range 145 version). Since its entry into operation, the ERJ 145 family has accumulated more than 27 million flight hours and almost 730 million passengers transported, being used by more than 120 operators.

Over the last seven years, the ERJ's global customer base has almost doubled, from 39 operators, in 2010, to 70, today. During the same period, the application and use of ERJ models has been growing in emerging markets, such as Africa, where the ERJ fleet has increased from 16 units in 2010 to almost 60 jets in 2017.

The Brazilian company added that the robust and with excellent operating history, the ERJ platform is a success in commercial aviation, with almost 900 units delivered, having applications in the business aviation market, with the Legacy 600 and Legacy 650 jets, as well as in defense, such as the AEW&C, Multi-Intel and maritime patrol for the Intelligence, Surveillance and Reconnaissance (ISR) segment. In total, more than 1,200 aircraft based on the ERJ 145 platform have already been delivered worldwide, making the ERJ program one of the most successful in Embraer's history.

**■ BOEING 737 MAX 9 TAKES FIRST FLIGHT**



The Boeing 737 MAX 9 completed its first flight on April 13, 2017 in the skies above Puget Sound, Washington, USA. The airplane completed a successful 2 hour, 42-minute flight, taking off from Renton Field in Renton, Washington, at 10:52 a.m. local time and landing at 1:34 p.m. at Seattle's Boeing Field. The 737 MAX program achieved

the milestone on schedule, beginning a comprehensive flight-test program leading to certification and delivery, Boeing stated.

"The MAX 9's first flight is another milestone that continues the program's strong track record of progress," said Boeing Commercial Airplanes President & CEO Kevin McAllister. "The MAX family of airplanes offers more value than any competitor and its strong market acceptance is reflected in over 3,700 airplanes on order from 86 customers around the world."

Piloted by Boeing Test & Evaluation Capts. Christine Walsh and Ed Wilson, the airplane performed tests on flight controls, systems and handling qualities. Boeing said that the MAX 9 will now undergo comprehensive flight testing before customer deliveries begin in 2018. The 737 MAX 9 is the second member of Boeing's industry leading 737 MAX family, with a maximum capacity of 220 passengers and a range of 3,515 nautical miles (6,509 kilometers).

"The 737 MAX team continues to fire on all cylinders," said Keith Leverkuhn, Vice President And General Manager, 737 MAX program, Boeing Commercial Airplanes. "Each new milestone we meet builds knowledge and experience that gets leveraged to keep the program moving forward on track."

According to Boeing, the 737 MAX incorporates the CFM International LEAP-1B engines, winglets and other improvements to deliver the highest efficiency, reliability and passenger comfort in the single-aisle market. The 737 MAX is the fastest-selling airplane in Boeing history, accumulating more than 3,700 orders to date from 86 customers worldwide.

**■ SIKORSKY TO ESTABLISH NEW CUSTOMER SUPPORT CENTER IN ASIA**

Sikorsky announced plans to expand its S-92 and S-76 helicopter support services in the Asia-Pacific region. Thai Aviation Services is scheduled to become the first Sikorsky Customer Support

Center in Thailand by the end of 2017. The announcement was made at the inaugural 2017 Rotorcraft Asia show, April 18, 2017.

"This decision further exemplifies Sikorsky's commitment to the Asia-Pacific region and to our continued focus on customer support excellence," said Christophe Nurit, Sikorsky's regional sales executive, Asia. "As the preferred service center in Thailand, Thai Aviation Services will provide a critical role in offering the highest level of support for Sikorsky helicopters in a strategically important region."

"Thai Aviation Services has a long-standing partnership with Sikorsky over the past 25 years. We look forward to expanding this partnership through the designation as a Customer Support Center and putting our extensive experience operating Sikorsky aircraft to use for the benefit of supporting all Sikorsky aircraft operating in the Asia Pacific region," said Craig Havas, Thai Aviation Services Deputy Managing Director – Operations, and S-92 Chief Pilot.

According to the rotorcraft manufacturer, the Customer Support Centers enable quick access to Sikorsky logistics and spare parts inventory for operators while providing advanced service capabilities. This support center will represent Sikorsky's seventh in the Asia-Pacific region and add to the growing network of 20 Sikorsky support centers world-wide.

In addition to authorized support centers, Sikorsky's customer support organization maintains four forward stocking locations in S-92 and S-76 fleet-concentrated regions and fields more than 100 customer service representatives, all connected through Sikorsky's Customer Care Center in Trumbull, Connecticut (USA).

Sikorsky, a Lockheed Martin Company, and Thai Aviation Services have done business together for more than 25 years. Thai Aviation Services operates only Sikorsky helicopters and recently renewed its existing fleet of commercial helicopters with five S-76 medium lift and two S-92 heavy lift aircraft. These aircraft enable the Bangkok-based operator to continue its track record of providing safe, reliable helicopter transportation to oil and gas customers in the Gulf of Thailand.

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■ **ROLLS-ROYCE WINS \$300M ORDER FROM LION GROUP**



**R**olls-Royce announced that it has won a \$300 million order from Indonesia-based Lion Group for Rolls-Royce Trent 700 engines to power three new Airbus A330 aircraft, supported by Rolls-Royce's engine service, TotalCare. The Lion Group already operates three of the aircraft, all powered by the Trent 700 engine.

Edward Sirait, CEO of Lion Group, said: "These aircraft are an exciting addition to our widebody fleet, allowing us to deliver new routes for our customers. We have already seen the economic advantages of the Trent 700 and TotalCare service with our in-service aircraft and we are very pleased to continue with this combination for our new aircraft."

Ewen McDonald, Rolls-Royce, Senior Vice President of Customers – Civil Aerospace, said: "Lion Group is a valued customer and we are delighted to support its growth plans for the future. We are proud of the success of the Trent 700 which has proven itself to be the engine of choice for A330 customers, with excellent efficiency and lower emissions."

The British engine manufacturer claimed that the engine has won more than 70 per cent of new orders over the last four years and accounts for a similar percentage on future A330 deliveries. More than 1,600 Trent 700s are now in service or on firm order.

■ **BOEING TO LAY OFF MORE ENGINEERS**

**B**oeing has warned its employees on April 17, 2017 about another round of involuntary layoffs affecting hundreds of engineers at the commercial aircraft unit, Reuters reported.

Increasing competition and slowing aircraft sales are quoted to have triggered the decision. According to a memo from John Hamilton, VP of Engineering at Boeing Commercial Aircraft, the layoffs are due to start on June 23, 2017. The aircraft manufacturer also stated that the extra job cuts will include senior management positions under the combination of attrition, voluntary layoffs and involuntary layoffs policies.

Previously, in March 2017, Boeing has accepted a total of 1880 voluntary layoffs from machinists and engineers working at different facilities around Seattle. On the January 10, Boeing sent out a memo to its employees about cutting engineer positions. This move came as a response to increased worldwide competition coupled with sluggish aircraft sales.

Last year, the company's total revenue dropped by 1.6% to \$94.6 billion as the sales of 747s declined. The financial performance also affected the cut of 777 production rate to five aircraft per month instead of seven.

■ **C919 COMPLETES FINAL GROUND TEST, CLOSER TO FIRST FLIGHT**



**C**hina's homegrown commercial jet COMAC C919 has completed a series of high-speed taxi tests which bring the much-anticipated commercial jet closer to its maiden flight. The first test was taken on April 16, 2017, and the fourth test was performed on April 23, 2017, at Shanghai Pudong International Airport (PVG). According to CNN Money, the April 23 test is the final ground trial for C919, and COMAC is expecting to fly the aircraft before the end of May 2017.

During the last test performed at Pudong Airport, the pilots had to demonstrate that the jet can safely stop on the runway.

China Daily added that during the test, the C919 slightly lifted its front landing gear to simulate takeoff.

Previously, the CFM LEAP-1C powered aircraft reportedly reached a top speed of around 248 kilometers per hour in the first high-speed taxi test. Local media reported that during the first test, the jet completed most of the ground-based pre-flight evaluations, including low-speed and medium-speed taxiing tests, to examine the whole aircraft and its key components and connecting parts.

■ **IAG'S NEW LCC LEVEL TOPS BOOKINGS BEFORE ITS OFFICIAL LAUNCH**



**I**nternational Airlines Group's (IAG) planned new trans-Atlantic budget airline LEVEL has received more than 100,000 tickets sold since the booking campaign launched on 17th of March 2017, the company reported.

IAG also said that the new long-haul airline brand has had over 700,000 hits on its website flylevel.com as visitors search for flights from Barcelona to Los Angeles, San Francisco (USA), Buenos Aires (Argentina) and Punta Cana (Dominican Republic).

IAG chief executive, Willie Walsh, said: "Selling more than 100,000 tickets in such a short period with a new brand is incredible. The response has been fantastic in all markets. We're enabling many people to fly long-haul for the first time and stimulating demand by providing them with more choice."

The first flight will take off on the 1st of June 2017 from Barcelona to Los Angeles followed by San Francisco (Oakland) on the 2nd of June, Punta Cana on the 10th of June and Buenos Aires on the 17th of June.

Walsh added: "This is just the start. In



summer 2018 we will have more aircraft and will operate more destinations from Barcelona. We're also planning to expand LEVEL operations to other European cities."

IAG is the parent company of British Airways, Iberia, Vueling and Aer Lingus. The group now operates a fleet of 548 aircraft flying to 274 destinations and carrying almost 95 million passengers each year.

■ **EASA'S RE-WRITTEN CS-23 CERTIFICATION RULES FOR SMALL AIRCRAFT**

The European Aviation Safety Agency (EASA) Certification Director Trevor Woods presented EASA's re-written CS-23 certification rules for small aircraft at Aero Expo in Friedrichshafen, Germany, 5th of April 2017, pointing out that the EASA CS-23 are new, smart and flexible rules, prepared with and for a safe innovative General Aviation (GA) industry. The re-organised CS-23 removes design limitations for manufacturers and thus open the way to innovation.

According to the GA industry players, the re-organised rules pave the way for a new era in general aviation.

"These new rules will allow us to bring new aeroplane models with features using increased automation to market. We anticipate that these new features will not only help increase the user experience, but will help improve safety," stated Simon Caldecott, President and CEO of Piper Aircraft as well as Chairman of the General Aviation Manufacturers Association (GAMA). "The introduction of the new CS-23 paves the way for a new era in general aviation."

According to the agency, the new CS-23 establishes objective and design-independent requirements. New designs will not be hampered by detailed prescriptive rules. This enables innovative solutions to enhance safety, while at the same time red tape, time and certification costs are reduced. The innovations are supported by better up-to-date industry standards which are continually developed in cooperation

between manufacturers, users, EASA and other authorities.

"It's revolutionary," added Ivo Boscarol, CEO of the Slovenian manufacturer Pipistrel, "which is why we have been an active supporter of the CS-23 initiative. Right now, we see tremendous opportunities in electric and hybrid propulsion and increased automation. The new CS-23 will enable us to move at the pace of these developments and more readily leverage these innovations."

EASA has participated in an international effort and cooperation with the FAA (and others) to re-organise the CS-23/Part 23 in order to revive certified general aviation. Furthermore, a harmonised re-organisation of both the related EU and US rules is vital for a global success.

Matthias Betsch, President of Flight Design, underlined: "I am sure the result we see here today is a testament to what we can accomplish when government and industry work hand in hand to achieve a common goal. In fact, it might be the best example yet of global cooperation between aviation authorities."

■ **BOEING COULD SAVE \$2-3M ON EACH DREAMLINER WITH 3D PRINTING**



Boeing has recently signed an agreement with Norway's Norsk Titanium for additive production of titanium parts for the 787 Dreamliner, according to a statement from Norsk Titanium. According to a representative of the Norwegian manufacturer, additive technology, commonly called 3D printing, could help

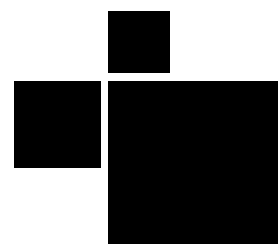
Boeing save anywhere between \$2 and \$3 million on each wide-body aircraft.

A lightweight titanium alloy used in 787 Dreamliners costs seven times more than aluminum. The cost of the alloy for one Dreamliner is \$17 million, with the total price per unit being \$256 million, according to Reuters. The 787 needs more titanium than similar aircraft, due to carbon-fiber fuselage and wings. Reducing the costs of the titanium would significantly affect unit costs.

Boeing designed the components and collaborated closely with Norsk Titanium throughout the development process. To certify these initial structural components on the Dreamliner, Boeing and Norsk Titanium undertook a rigorous testing program with FAA certification deliverables completed in February 2017. Both companies hope for getting the required production permits for additive production shortly and start manufacturing by the end of 2017.

"We are proud to take this historical step with a great aerospace innovator like Boeing," said Norsk Titanium President & Chief Executive Officer Warren M. Boley, Jr. "The Norsk Titanium team will continue to expand the portfolio of components supplied to Boeing meeting stringent certification requirements. It is an honor to earn FAA approval for these structural parts."

Norsk Titanium would initially produce the parts in Europe but has plans to move production to Plattsburgh, New York by the end of 2017.



## P&W asks carriers to perform early checks on PW1500G engines

Engine manufacturer Pratt & Whitney has reportedly asked Swiss International Air Lines and airBaltic to perform engine part inspections on their CSeries aircraft, according to Bombardier. The request was triggered by recent engine troubles faced by a similar line of engines used in Airbus A320neo plane. The issues forced some A320neos operated by GoAir and IndiGo to perform emergency landings.



According to Bryan Tucker, the spokesperson for Bombardier Commercial Aircraft, P&W had prompted the two launch customers of the CSeries to perform combustor lining inspections after 2000 hours of flying. Tucker also added that the engines for the CSeries planes to be delivered to Korean Air Liners in the summer of 2017 would feature corrected liners.

Although no issues had been reported concerning the PW1500G engine that powers CSeries aircraft, faults were discovered in a different engine of the same line – the PW1100G powering Airbus A320neo jets.

A total of 42 PW1100G engines powering Airbus A320neo aircraft were removed prematurely around the globe after claims from India's Directorate General of Civil Aviation (DGCA), quoting bearing distress and combustor glitches. At the time being, India has the largest number of A320neo flying, with the DGCA having ordered Indigo and Go Air in February to inspect P&W engines that have exceeded 1000 hours of service.

## Etihad Airways Engineering, Diehl sign for 3D printing project

Etihad Airways Engineering has signed an agreement with Diehl Aerosystems, an aerospace company based in Germany, to jointly design, manufacture and install the first serial produced 3D-printed cabin plastic part on an aircraft for one of its customers. Additive manufacturing – commonly referred to as 3D-printing – reduces lead time in design, decreases production cost of and enables speedier manufacturing.

Etihad Airways Engineering and Diehl have collaborated to develop and manufacture an inflight entertainment (IFE) cover plate which will be installed in economy seats on several aircraft of a Middle Eastern airline. The two companies plan to create a range of products based on the experience gained from this pilot project. Jeff Wilkinson, Etihad Airways Engineering Chief Executive Officer, said: "Etihad Airways Engineering is leveraging its Part 21J Design Organisation approval by EASA – with Diehl contributing as a Part 21G Production Organisation – in this pilot project.

"Our partnership with Diehl will help us commercialise this technology and make it available to our customers around the world."

Wilkinson explained that the 3D-printed part offered a cost saving of around 20 to 30 per cent, with the added benefit of not requiring tooling and avoiding any permanent modification to the seat. Etihad Airways Engineering claimed that it is the first airline maintenance, repair and overhaul (MRO) provider with European Aviation Safety Agency (EASA) approval to design, certify, manufacture and fly 3D-printed aircraft cabin plastic parts. Diehl Aerosystems has been working in the field of 3D printing technology for several years, building up knowledge and capabilities to supply EASA-certified 3D-printed aircraft parts to the aviation industry.



## AFI KLM E&M completes GENx-1B correlation tests

AFI KLM E&M's engine test cell unit at Paris-CDG airport successfully carried out a series of the Boeing 787's GENx-1B engine correlation tests. According to the MRO company subsidiary of Air France-KLM, for almost a week, a stable performance engine, provided by KLM, was used in the test cell for the correlation tests. The correlation consists of the comparison of engine performance parameters measured on the same tested in two individual test facilities, where one facility is the reference/baseline.

With the recent tests, AFI KLM E&M claimed that the Paris-CDG test cell is now officially able to carry out the required engine test run after each maintenance shop visit carried out by the Amsterdam engine shop.

The MRO company added that nearly ten 787 operators have already entrusted AFI KLM E&M with their 787 engine maintenance, with an offering ranging from on-wing support to overhauls, parts replacement and a growing array of parts repairs and now also engine tests. Next to being the leading independent GENx-1B MRO on the market for the GENx-1B power plant, AFI KLM E&M is also an approved General Electric maintenance center and as such benefits from the manufacturer's guarantee.

"In terms of our offer and expertise, we clearly have a head start on the GENx-1B maintenance market," emphasized Fabrice Defrance, Senior Vice President Commercial AFI KLM E&M. "We are the first airline/MRO to have mastered this product, with a broad experience of more than 40 quick turns of which the majority was operated by airlines operating in severe engine operation conditions."

AFI KLM E&M stated that it is also in the process of developing new repairs for the engine (combustion chamber, high pressure rotor), and a first performance restoration shop visit is expected to be carried out before the end of the year at the Amsterdam engine shop.

## GOL, AFI KLM E&M sign for B737NG engines

The MRO company subsidiary of Air France-KLM AFI KLM E&M and Brazilian airline GOL Linhas Aéreas Inteligentes (GOL) announce a further step in their long-standing, long-term partnership. In 2016, AFI KLM E&M has been selected by GOL as a strategic provider for part of its fleet of 122 Boeing Next-Generation 737s, handling CFM56-7 maintenance and repairs at Amsterdam Airport Schiphol. In accordance with such agreement, AFI KLM E&M have started to receive the awarded engines from January 2017.

"It was essential for us to bring efficiency to our engine maintenance and minimize TAT," explained Julio Perotti, Head of Supply Chain at GOL. "We also wanted uncompromising support on quality and reliability. The engines contract that we have signed with AFI KLM E&M meets these requirements and we have every confidence in the transparent partnership relationship binding our two groups."

In 2014, to strengthen the commercial cooperation between the two groups, AIR FRANCE KLM and GOL signed an exclusive long-term strategic partnership agreement that also organizes increased cooperation in the aircraft maintenance sphere. "By entrusting us CFM56-7 engine support, GOL has confirmed the strategic relation between our two groups" said Ton Dortmans, Executive Vice President KLM E&M.

GOL Linhas Aéreas Inteligentes S.A. operates more than 750 flights daily to 63 destinations, including 10 international services to South America and the Caribbean. The airline now operates a fleet of 127 all Boeing 737 Next Generation aircraft.

## Vietnam Airlines Engineering receives EASA Part-145 approval

Vietnam Airlines Engineering Company (VAECO), an MRO company subsidiary of Vietnam Airlines, has announced EASA Part-145 Approval Certificate of Aircraft Maintenance Organisation issued by the European Aviation Safety Agency (EASA).



According to the MRO company, the maintenance organisations possessing the EASA part-145 approval certificate are allowed to provide maintenance, overhaul and commissioning services for aircrafts with European registration. In addition, this is also a necessary condition regarding experience and capacity for airlines or organisations that purchase or lease aircraft to be able to choose maintenance facilities in Vietnam.

VAECO is the first and only aircraft maintenance organisation in Vietnam that received the most two prestigious certificates of aviation safety, which are FAR part-145 (by the US Federal Aviation Administration - FAA) and EASA part-145 certificates.

"With CAAV, FAR part-145 and other certificates approved by 20 aviation authorities around the world, the EASA part-145 marked the development and integration of VAECO, meeting all demanding requirements on international aviation safety in the field of aircraft maintenance, thus contributing to the image of Vietnam as a reliable regional and international aviation market", said Duong Tri Thanh – President & CEO of Vietnam Airlines.

"EASA is very happy that the certificate has been delivered to VAECO so fast and that we can start our "formal relationship", and very confident that our next years together will be very successful. During the audit we could see that you have already had a very solid organisation in place," said Tajes Rosa – EASA Inspector.

## Comlux grows in Asia with two new projects signed



Comlux Aviation Group announced that its wing Comlux Completion, a provider of VIP aviation service based in Indiana (USA), has signed two new projects, one Global 6000 and one BBJ, with repeat customers based in Asia. Both projects are for major refurbishments and will be performed in the Indianapolis facility.

According to Comlux, the undisclosed owner of the BBJ is represented by the aircraft management company, Sino Jet, led by CEO Jenny Lau. Her involvement was integral in the selection of the best service center for this project. It is the second BBJ managed by Sino Jet coming to Indianapolis. The workscope will consist of various cabin reconfigurations including adding a one of a kind custom sideledge pull out bed to allow more sleeping positions on the aircraft for more comfort on board.

Comlux also signed another repeat customer for a new Global 6000 aircraft. They have selected Comlux to perform a completely new and luxurious cabin interior design to include all new soft goods, seat designs, metallic treatments, fixtures, wood, stone counter tops, and decorative trim in order to provide the client a true one-of-a-kind experience reflecting his own personal flare.

"With these two new contracts, Comlux reaffirms the continued business growth of its ultra-modern facility in the US, as well as further development of the Asian market," stated Scott Meyer, Comlux Completion's CEO. "Comlux offers the quality and customer experience to ensure our clients return no matter the size of the workscope."

The company said that after a busy schedule in 2016 with not only multiple VIP completions (1 ACJ330, 1 BBJ and 1 SBJ), but also a steady stream of maintenance clients (3 BBJ, 1 ACJ), Comlux is growing its backlog.

## GE Aviation to certify new aerobatic turboprop H Series engine

GE Aviation announced that it has submitted a type certification request to the European Aviation Safety Agency (EASA) for GE's first aerobatic turboprop engine. The new H Series Aerobatic engine model will feature the first Electronic Engine and Propeller Control system (EEPC) in its class, according to GE.

According to GE, EEPC will significantly reduce pilot workload and provide automatic limiting functions. With certification expected in 2018, the H Series Aerobatic engine is tailored for leisure and training for light aircraft in the 550-850 SHP range.

"We continue to invest in the H Series product line, as well as the turboprop market, to develop innovative solutions

for our customers," said Norman Baker, President & Managing Executive of GE's Business & General Aviation Turboprops. "We are pleased to introduce a new H Series product line extension, an aerobatic engine. It will be best-in-class in terms of performance and technology to meet the rugged demands of the high-performance turboprop market."

GE claimed that the GE H Series Aerobatic engine will be the first certified aerobatic engine featuring the EEPC system in its power category. EEPC technology enables control of both the engine and propeller operation with a single lever.

The GE H Series engine with the EEPC system received its type certification



from EASA last December, followed by its Federal Aviation Administration (FAA) type certificate in March. The EEPC-equipped H Series has already been selected for four aircraft applications.

The H Series turboprop family incorporates GE's 3-D aerodynamic design techniques and advanced materials to create a powerful, fuel-efficient, durable engine. Adding more value, there are no recurrent fuel nozzle inspections or intermediate hot section inspection required. The H Series turboprop serves a multitude of uses such as agricultural, business turboprops, commuter and utility aircraft.

## PEMCO, Mitsubishi Aircraft sign MRO licensing agreement

The US-based aviation maintenance and engineering company PEMCO World Air Services (PEMCO), a wholly owned subsidiary of Air Transport Services Group, has finalized and signed an MRO licensing agreement with Mitsubishi Aircraft Corporation to be a preferred MRO service provider of the Mitsubishi Regional Jet (MRJ). The letter of intent was announced in July 2016 at the Farnborough International Airshow in Hampshire, England.

Together, PEMCO and Mitsubishi Aircraft will provide services, improved efficiencies, and cost advantages to MRJ aircraft operators. The companies will offer airframe related MRO services to North American MRJ customers, such as applicable letter and heavy checks, structural repairs, modifications, and warranty work.

"We're honored to sign the official licensing agreement with Mitsubishi Aircraft," said Pastor Lopez, PEMCO general manager. "We look forward to serving MRJ operators in North America and building our partnership with Mitsubishi Aircraft."

PEMCO claimed that it was chosen following a rigorous selection process by Mitsubishi Aircraft that encompassed the review of the company's operations and standards. PEMCO is prepared to handle MRJ aircraft maintenance following entry into service, and will continue to provide quality service, customer support, and outstanding on-time rates to all its' customers.

## Hawker Pacific Asia to support Embraer's ERJ jets



Embraer appointed Hawker Pacific Asia's MRO facility in Singapore as the authorised service centre for the ERJ 135 and ERJ 145 commercial jets for the Asia Pacific region. They are now part of the Embraer Authorised MRO Network to support the ERJ family of commercial jets operating globally.

The appointment of Hawker Pacific Asia for this Embraer commercial aircraft type adds to the MRO support they currently provide for Embraer Executive Jets' portfolio of seven business jet models – from the Phenom 100E to the Lineage 1000E.

"The establishment of Hawker Pacific as our authorised service centre in Singapore is part of our plan to grow our commercial aviation MRO footprint to support the growing fleet of commercial aircraft in the Asia Pacific region," Augustine Tai, Director, Asia Pacific, Embraer Services & Support, said. "Asia Pacific is an important market for us and we will continue to enhance our services and support network in meeting the growing expectations of our expanding customer base."

"Hawker Pacific Asia is honoured to be appointed an EASC for the ERJ135/145, and we are committed to providing excellent service with exemplary safety standards to support Embraer's fleet of aircraft in the region," Louis Leong, Vice President Asia, Hawker Pacific Asia, said.

## LHT, Asiana Airlines sign for A350 support, CF6 engine services

Lufthansa Technik (LHT) and the South Korean carrier Asiana Airlines have signed two long-term agreements. In the frame of a 15-year Total Component Support (TCS) contract, Lufthansa Technik will support the carrier's future Airbus A350 fleet with components and provide access to an extensive spare parts pool. Furthermore, a four-year contract running from 2018 covers the repair and overhaul of Asiana's CF6-80 engines powering the airline's Boeing 747 and 767 fleets.

Lufthansa Technik will provide A350 components not only from its main warehouse in Germany but also from its existing spare parts pool in Hong Kong, which will be expanded to accommodate the new contract with Asiana Airlines.

Sang-Woo Noh, Senior Vice President Purchasing and General Administration of Asiana Airlines, said: "We have come to know Lufthansa Technik as a reliable and innovative partner from the support of our A320 fleet. For our new A350s, we need long-term security – starting from day one."

He added: "We have chosen Lufthansa Technik to overhaul our CF6-80 engines because we are convinced, that Lufthansa Technik, as a reliable partner, is the best choice for us to support our Boeing 747 and 767 fleets."

"We are very proud that Asiana Airlines has decided to extend our trustful cooperation. This contract is a further milestone in our long-term partnership. We

look forward to supporting Asiana's A350 fleet with our extensive material supply capacities," says Gerald Steinhoff, Senior Vice President Corporate Sales Asia Pacific of Lufthansa Technik.

According to LHT, both parties have been working together for more than 20 years. Currently, the Hamburg-based MRO company is looking after Asiana's Airbus A320 fleet, likewise under a Total Component Support (TCS) contract. Lufthansa Technik is also supporting Asiana's V2500 engines and APS3200 auxiliary power units.

Asiana Airlines has ordered 22 Airbus A350 series aircraft, with four A350-900s scheduled to enter service this year. LHT said that once all the ordered A350 have been delivered, Asiana Airlines will operate one of the largest fleets of this aircraft type in Asia, and will become Lufthansa Technik's biggest A350-customer in the area.

## GMF, Jet Parts Engineering host MRO symposium and sign MoU



The Indonesia-based MRO company Garuda Maintenance Facility Aero Asia (GMF) with a US-based MRO company Jet Parts Engineering has conducted the 'Asia Cost Savings Symposium 2017'

in Bali, Indonesia, April 12 to 14, 2017. The event discussed cost savings in aircraft maintenance and applicable 'best practice' from each business sector.

According to GMF, this event was attended by more than 70 aviation business players among Asia including Airlines, MRO companies and Government bodies. This event was established by intention from GMF and Jet Parts Engineering to bring a solution for more efficient aircraft maintenance. Aircraft maintenance takes more than 40% of total airline operation cost, according to both MRO companies.

After the symposium, GMF and Jet Parts Engineering inked a Memorandum of Understanding (MoU) in which Jet Parts Engineering appointed GMF as its 'Authorized Distributor' for Asia Region. Acting as President & CEO of GMF AeroAsia, I Wayan Susena was signed the MoU with Anu Goel, Jet Parts Engineering's CEO. "We highly appreciate Jet Parts for entrusting GMF as its authorized distributor," said Susena. He also said this partnership is has a potential to expanding the business and strengthen the networks among Asia for both parties.

Goel said: "GMF is one of leading MRO in Asia Region. Together with Jet Parts, we're optimist to develop aviation industry in Asia particularly. On the same day, GMF also introduced its new service named 'GMF AeroTrade', offering the airlines and other MRO companies easier access to support material. With the latest MoU and new service, GMF said that it expects to achieve its 2020's vision, to become the Top 10 MRO company in the world.

## Rockwell Collins selected for Pakistan Air Force C-130 upgrade

Rockwell Collins' Flight2™ avionics system has been selected by the Pakistan Air Force through the Foreign Military Sales Office, Warner Robins, Georgia, for the upgrade of up to 11 C-130E and 5 C-130B aircraft.

Rockwell Collins will provide the integrated avionics suite along with training and technical support during installation. Additional support includes consolidated flight manuals, checklists and maintenance supplements required to operate and maintain the fleet.

"Pakistan Air Force pilots will experience greater situational awareness and communications capabilities with the highly advanced avionics onboard these aircraft," said Dave Schreck, vice president and general manager of Airborne Solutions for Rockwell Collins. "Through our work with the Pakistan Air Force, we look forward to continuing our long legacy of helping C-130 pilots achieve their missions with these important upgrades."

The Rockwell Collins Flight2 avionics system will provide the Pakistan C-130 aircraft with unrestricted access to global airspace by meeting current Communication, Navigation, Surveillance/Air Traffic Management airspace requirements.

## Lufthansa Technik receives CAAC approval for ACJ319

The Civil Aviation Administration of China (CAAC) has approved Lufthansa Technik as maintenance station for Airbus A319 aircraft. This new approval enables the company to perform line and heavy maintenance services as well as cabin refurbishments on Chinese B-registered Airbus A319 aircraft.

The approval has been obtained in line with the first A319ACJ base maintenance project already secured by Lufthansa Technik. A B-registered ACJ319 is currently undergoing a 6 year check at Lufthansa Technik's VIP maintenance facility in Hamburg / Germany. The aircraft was originally outfitted with a VIP cabin by the Lufthansa Technik Group for a Chinese customer. After six years of smooth and reliable operations, the aircraft now returns to Lufthansa Technik for its first major heavy maintenance check. Besides maintenance, the aircraft will receive a comprehensive cabin refurbishment to give the aircraft a new and fresh appeal after



six years of operations.

"This approval is a milestone for us as the A319 is a popular aircraft type in Greater China. It helps us to further extend our MRO services for VIP customers from that region. I am sure that we will create significant additional business thanks to the approval, as removing and installing the VIP cabin is a very sensitive work which shall only be performed by VIP Interior specialists", said Thomas Decher, Vice President VIP Maintenance & Modifications.

"If commercial aircraft MRO suppliers work on the VIP cabin which are not familiar with handling the special equipment and materials, such as the fine leather seats, embroidered light color carpets or sensitive

wooden surfaces, parts of the cabin can easily get damaged and scratched. Furthermore, re-installing the cabin in the aircraft after the check is a very challenging task. The interior and electrical functions must fit and work perfectly in the aircraft without any visible gaps in order to protect the elegant appearance."

So far, Lufthansa Technik has outfitted more than 30 VIP aircraft for customers in Greater China alone. In addition to the VIP completion business the company offers a comprehensive portfolio of maintenance, repair, overhaul, refurbishment and modification services for its VIP customers. Besides A319, Lufthansa Technik holds CAAC-approvals to perform heavy maintenance of various other Airbus and Boeing aircraft types, like B747, A340 and A318.

## Lufthansa Technik prepares cabin modifications for Eurowings

With 33 Air Berlin aircraft due to be operated by Eurowings, Lufthansa Technik announced that its engineering department in Hamburg (Germany) provides extensive engineering services to convert the cabins. The Eurowings technicians in Düsseldorf will be adapting the fleet comprising of Airbus A319 and A320 aircraft to the airline's standards through the end of April 2017.

For Eurowings, this access to 33 aircraft is a milestone on the way to making the brand a leading provider of low-cost direct flights in Europe, the MRO company said.

Lufthansa Technik's engineers prepared the required design documents for modifications that included an increase in the seat pitch and the corresponding adjustment of the service elements above the passengers. Other tasks comprise the installation of new safety belts, the adaptation of the in-flight entertainment hardware and the application of new foils in the Eurowings design to the cabin monuments.

"The modification of 33 aircraft in such a short amount of time requires intensive cooperation and great experience," says Ole



Duenhaupt, Design Verification Engineer for cabin modifications at Lufthansa Technik, describing the challenge of this job.

"The responsible team, consisting of representatives from the customer Air Berlin as well as technicians from Eurowings and our engineering department, coordinated and completed all the required steps – from the preparation of the design documents and the planning and coordination of the layovers to the aircrafts' approval and acceptance for flight operations – in the shortest time possible. All the wheels interlocked with precision."

At the end of April, all 33 Air Berlin aircraft will be available to Eurowings for operation with the new cabin design.

## US might sell 40 CH-53Ks to Germany to cut the price tag

The Pentagon's CH-53K King Stallion heavy lift rotorcraft is slated to be more expensive on a per-unit basis than the ludicrously expensive F-35A. If the German Bundeswehr can be swayed to make an order, however, the chopper's price may go down for everyone.

Germany is in talks with Lockheed Sikorsky about a deal for 40 King Stallions, US Marine Col. Henry Vanderborght told reporters on Monday, 3rd of April 2017, following an annual sea-air-space conference held outside Washington, DC.

If Bundeswehr signs the deal for 40 King Stallions, Lockheed Sikorsky claims everyone would get the aircraft at a lower price. "You add another 25 percent to your production run, production unit cost goes down," Vanderborght said.

The Marine Corps is on the books to buy 200 King Stallions for around \$122 million each, Sputnik reported in March 2017. The Corps' King Stallion began like many Pentagon projects: the initial cost estimates said one thing, but the reality of building the new military equipment meant those costs would inevitably rise as unforeseen



factors popped up.

Looking at program costs is infrequently an accurate indicator of how much the Pentagon's toys will cost. The King Stallion could be anywhere from 22 percent over budget per aircraft, which is how the \$122 million is calculated, to \$131 million per unit after taxes, titles and tags are factored in, Defense News reported in a new calculation on the 3rd of April 2017.

The US Navy's new USS Gerald Ford has come in at least 20 percent over budget, at a price of \$12.9 billion. And of course the "scandal and tragedy" that is the F-35 Joint Strike Fighter program is at least five years behind schedule and \$13 billion more expensive than expectations, Popular Mechanics reported.

## Boeing wins \$2.2B to produce anti-sub warfare aircraft

The US Navy has awarded \$2.2 billion for production of P-8A anti-submarine and spy planes, the Department of Defense



announced in a press release. US defense giant Boeing has received a \$2.2 billion award to manufacture 11 P-8A anti-submarine and surveillance aircraft for the US Navy and other partners, according to the release.

"The Boeing Co., Seattle, Washington, is being awarded a \$2,196,638,752 modification to a previously awarded contract for the manufacture and delivery of 17 P-8A aircraft for the Navy (11), foreign military sales (2), and cooperative agreement partners (4)," the release explained.

The P-8A Poseidon is designed for long-range anti-submarine, anti-surface warfare and intelligence, surveillance and reconnaissance missions. It is based on Boeing's 737-800. Work will be performed in the US States of Washington, Maryland, New York, Illinois, California and Utah. The contract is expected to be fulfilled in December 2020.

## Maiden Firing of BrahMos Land Attack Supersonic Cruise Missile

Indian Navy successfully undertook the firing of BrahMos Land Attack Supersonic Cruise Missile from a ship. This variant of Long Range BrahMos Missile was fired from Indian Naval Ship Teg, a Guided Missile Frigate, on a target on land. BrahMos Missile has been jointly developed by India and Russia, and its Anti Ship variant has already been inducted into Indian Navy. Majority of the frontline ships of Indian Navy, like the Kolkata, Ranvir and Teg classes of ships, are capable of firing this missile. Land Attack variant of BrahMos Missile provides Indian Naval Ships the capability to precisely neutralise selected targets deep inland, far away from coast, from stand-off ranges at sea.



## Russia to supply 10 Su-35s to China in 2017

Russia's United Aircraft Corporation (UAC) will supply 10 Su-35 4++ generation aircraft to China in 2017, UAC President Yuri Slyusar said Tuesday, 11th of April 2017, Sputnik News reported. "Our traditional buyer of 4++ generation aircraft is China. In 2017, we will supply ten Su-35 aircraft to China's Defense Ministry," Slyusar said, as aired by the Rossiya 24 broadcaster.

In 2015, China became the first country to order the Su-35 aircraft, ordering 24 vehicles worth \$2 billion. Recent reports emerged that Russia has already delivered four Su-35 aircraft to China.

The Su-35 fighter is a 4++ generation aircraft employing technologies of the fifth generation, designed by the Sukhoi Aviation Holding Company, which belongs to Russia's United Aircraft Corporation. The first experimental Su-35 was first presented at Russia's MAKS-2007 air show and was later introduced to a foreign audience at the 2013 Paris Air Show.



## L-159 ALCA production to be restarted

Czech plane manufacturer Aero Vodochody has recently announced plans for revitalizing the production of L-159 ALCA light attack planes.

The production line of the L-159 was halted in 2003. The new variant will undergo substantial modernization and will be manufactured as a light attack aircraft, the original L-159 ALCA being an advanced trainer jet. The scope of modernization has not been disclosed yet, but it will most likely include improved avionics and weapons.

According to Aero Vodochody, the modernized L-159 will find customers due to its broad application scale and low cost – \$12-15 million per unit.



## Second Boeing T-X takes flight

Boeing and partner Saab, a Swedish defense company, have completed the first flight of their second production-ready T-X aircraft, which is identical to the first and designed specifically for the U.S. Air Force advanced pilot training requirement. During the one-hour flight, lead T-X Test Pilot Steve Schmidt and Boeing Test Pilot for Air Force Programs Matt Giese validated key aspects of the aircraft and further demonstrated the low-risk and performance of the design, proving its repeatability in manufacturing.

"The jet handled exactly like the first aircraft and the simulator, meeting all expectations," said Giese. "The front and back cockpits work together seamlessly



and the handling is superior. It's the perfect aircraft for training future generations of combat pilots."

Both pilots trained for the flight using the complete Boeing T-X system, which includes ground-based training and simulation.

"Our successful flight test program is a testament to the fact that our offering is the right choice for the U.S. Air Force," said Schmidt. "This aircraft was built to Air

Force requirements and designed to fulfill the Air Education and Training Command mission."

According to Boeing, its T-X jet has one engine, twin tails, stadium seating, and an advanced cockpit with embedded training. Boeing and Saab revealed their design in September 2016 and flew the first aircraft last December. T-X will replace the Air Force's aging T-38 aircraft. Initial operating capability is planned for 2024.



## 500th Eurofighter Typhoon produced, delivered to Italian AF

The 500th Eurofighter Typhoon has been delivered on the 11th of April 2017 to the Italian Air Force during a special ceremony held at Leonardo Aircraft Division's Turin site, Italy.

Volker Paltzo, Chief Executive Officer of Eurofighter Jagdflugzeug, manufacturer of the jet fighter, said: "The 500 strong Eurofighter Typhoon fleet represents one of the largest and most capable fighter fleets in the western hemisphere, and will be the backbone of European airpower for decades to come. Today's handover is a great testament to the programme's success, and I firmly expect to see the fleet grow further as our partner companies continue to pursue opportunities for more orders internationally."

Filippo Bagnato, Leonardo Aircraft Division Managing Director, said: "We are very proud to deliver the 500th Eurofighter Typhoon produced to the Italian Air Force. The Eurofighter Typhoon is the largest collaborative industrial programme in Europe, it is a successful and significant contributor to the nation's economic wellbeing, employing high-skilled workers and generating thousands of high-value manufacturing and engineering jobs. We are now fully committed to completing deliveries to the Italian Air Force, to develop the capabilities of the aircraft, and to the activities envisaged by Kuwait's contract, while continuing to pursue a number of significant market opportunities around the world."

According to Eurofighter Jagdflugzeug, the first Eurofighter was



delivered to the UK Royal Air Force at the end of 2003. The 100th Eurofighter was delivered to the UK Royal Air Force in September 2006. The 200th aircraft was handed over to the German Air Force in November 2009. The 300th aircraft was delivered to the Spanish Air Force in October 2011, and the 400th to the German Air Force in December 2013.

The Eurofighter Jagdflugzeug also said that through a series of continual enhancement steps, new capabilities are being added to the aircraft, with test and integration activity currently underway for advanced beyond visual range air-to-air missile Meteor, the precision guided cruise missile Storm Shadow and the precision attack missile Brimstone.

Eurofighter Typhoon is built by four European nations – the UK, Germany, Italy and Spain, and their aerospace and defence companies such as BAE Systems, Airbus Defence & Space and Leonardo. This partnership is allowing equal access to shared manufacturing, development and the creation of long-lasting political and industrial relations. Eurofighter Jagdflugzeug GmbH is a multinational company that co-ordinates the design, production and upgrade of the Eurofighter Typhoon aircraft. The consortium was founded in 1986 and is based and registered in Munich.

## Airbus Helicopters, IAR sign for H215M production in Romania



Airbus Helicopters and the Romanian aerospace company Industria Aeronautică Română (IAR) have signed a general agreement for an exclusive cooperation for the heavy twin engine H215M multi-role helicopter. Under this general agreement IAR will become the

prime contractor for the H215M for any future order by the Romanian Ministry of Defense to replace their ageing fleet.

"We are proud to have signed this general agreement that results from almost 50 years of cooperation between IAR and Airbus Helicopters" said Neculai Banea,

General Director of IAR. "IAR has built around 360 helicopters under license thanks to this successful partnership with Airbus Helicopters and we are looking forward to customizing and supporting the H215M" he added.

"This agreement is an important milestone in the construction of a European defense partnership. We are convinced that this relationship will last another 50 years and that the H215M will correspond perfectly to the needs of the Romanian armies" said Olivier Michalon, Senior Vice President, Head of Europe region.

According to Airbus Helicopters, it has been present in Romania for over fifteen years through its customer centre, Airbus Helicopters Romania, a successful enterprise since its creation with about 75% of its turnover achieved through export contracts. Airbus Helicopters Industries, a 10,000m<sup>2</sup> factory based in Brasov, was inaugurated in 2016 and will house production of the H215 in Romania.

## Iran shows Qaher F-313 jet trainer

Tehran has recently shown its homegrown single-seat jet trainer Qaher F-313 which performed a taxi test on April 15, 2017 at the Iranian Helicopter Support and Renewal Company, Iran's news agency IRNA reported.

Defense Minister of Iran Hossein Dehqan said that manufacturing Qaher-313 and Kosar-88 training jets in Iran is a prelude to production of heavy planes. The jets are expected to join the air force after completing flight tests.

The series of tests for the aircraft will take up to 10 years before they can be used in operations. Dehqan also said that Tehran produces all jet parts inside the country except for the engines. However, he noted that there is an agenda to produce them domestically as well.

The Minister also stated that the Qaher F-313 is able to land on short airstrips and has low radar cross sections that enable the



aircraft to be invisible to radars. It is also equipped with additional fuel tanks and internal bombs.

According to Tehran Times, the Islamic Republic of Iran launched a self-sufficient military program in the 1980s as a result of the embargo from Western countries. Iran-made aircraft includes the Qaher which was rolled out in 2007 with other jet fighters called Azarakhsh and Saeqeh. Azarakhsh and Saeqeh are widely regarded as the reverse-engineered variant of F-5 Tiger II.

## F-35As deploy to Estonia for the first time



Two U.S. Air Force's F-35A Lightning II aircraft and approximately 20 supporting Airmen arrived at Ämari Air Base, Estonia, on April 25, 2017, from RAF Lakenheath, England.

The F-35As are participating in their first-ever training deployment to Europe.

The aircraft and total force Airmen are from the 34th Fighter Squadron, 388th Fighter Wing, and the Air Force Reserve's 466th Fighter Squadron, 419th Fighter Wing, Hill Air Force Base, Utah.

The deployment has been planned for some time, has no relations to current events, and was conducted in close coordination with Estonian allies. It allows the F-35A to engage in familiarization training within the European theater while reassuring allies and partners of U.S. dedication to the enduring peace and stability of the region, USAF stated. According to USAF, this deployment maximizes training opportunities with our allies and partners and serves as a visible demonstration of the United States' resolve to support NATO assurance measures.

"In addition, hosting such advanced aircraft is certainly a big recognition to Ämari Air Base and to the Estonian air force as a whole, who have made your stay here possible. You're always welcome here. Enjoy your stay in Estonia and in our skies," added Tsahkna.

This is the first overseas flying training deployment for the F-35A, signifying an important milestone and natural progression of the joint strike fighter program. It is the perfect opportunity for the combat-ready aircraft to train alongside U.S. and allied aircraft in a realistic training environment while demonstrating its operational capabilities. Also, it helps to integrate with NATO's infrastructure and enhance 5th generation aircraft interoperability. The aircraft and Airmen began arriving in Europe on April 15, and are scheduled to remain in Estonia for a brief period of time before returning to RAF Lakenheath to continue their training deployment. The KC-135 is from the 100th Air Refueling Wing, RAF Mildenhall, England, and is providing refueling support for the deployment to Estonia.

## Airbus to deliver 2 more C295s to Kazakhstan

Kazakhstan is to acquire two more Airbus C295 transport aircraft following the signature of a new contract with Airbus Defence and Space. The agreement, which includes a spares and support package, covers the final two aircraft included in a memorandum of understanding signed in 2012.

Both aircraft will be delivered in the second half of this year and will take the Kazakhstan Air Defence Forces' C295 fleet to eight and total C295 sales to 186, including 12 in the CIS, the company stated.

According to Airbus Defence and Space, C295 is a new generation of airlifter able to carry up to nine tonnes of payload or up to 71 personnel, at a maximum cruise speed of 260 knot (480 km/h). Fitted with a retractable landing gear and a pressurised cabin, it can cruise at altitudes up to 25,000 feet, while retaining remarkable short take-off & landing (STOL).

The aircraft is powered by two Pratt & Whitney Canada PW127G turboprop engines. First delivered in 2001, C295 is a developed version of CN235, offering greater capacity and range.

## Cathay Pacific appoints new director of cargo



**J**ames Ginns will be taking over from Simon Large as Cathay Pacific's director of cargo. Simon Large, Cathay's the director of cargo, will be taking over as customer director on the passenger side of the business.

Ginns is currently director of service delivery at Cathay Pacific. The transition is expected to take place on June 1, after a period of transition. Ginns has been at Cathay since 1991, however his experience was largely on the passenger side.

The new appointment is part of a company-wide management transition. Rupert Hogg has been appointed as the new chief executive at Cathay Pacific, with Ivan Chu leaving that position to take over as chairman of parent company John Swire & Sons' China business.

## Yusen expands European pharma reach with two warehouse projects

**I**n the heart of Europe's pharmaceutical sector, Yusen Logistics is launching two major pharmaceutical and healthcare industry logistics projects: one in Belgium, the other in the



Netherlands. In the Belgian city of Melsele, at the Yusen Logistics Antwerp Distribution Center (ADC), Yusen is expanding the existing facility, adding an adjoining 8,000-square-meter warehouse. The new structure will be divided between cold storage (2-8°C) and ambient storage (15-25°C), and will be open for business towards the end of 2017, Yusen said.

The Melsele facility currently handles more than 2 million pallets of pharmaceuticals per annum and the additional capacity is expected to add to that. Yusen will also break ground on a new healthcare logistics facility in the Dutch city of Roosendaal. The new 11,225-square-meter pharmaceutical facility is a response to demand for "premium-quality" pharmaceutical and healthcare products from customers in the Netherlands, the company said. The facility will have the same kind of cold storage and ambient temperature zones as the Melsele facility and is expected to open by the first quarter of 2018.

## Dispatchers, Atlas Air Worldwide ratify new bargaining agreement

**A**tlas Air Worldwide Holdings and its dispatchers have ratified a collective bargaining agreement, covering two subsidiary carriers, Atlas Air and Polar Air Cargo Worldwide. The four-year contract extension includes pay increases, as well as benefits associated with the dispatcher's relocation to the company's operating hub at Cincinnati/Northern Kentucky International Airport (CVG), as part of Amazon's planned relocation to CVG from Wilmington.

John Dietrich, executive vice president and COO at Atlas Air Worldwide, said that the new agreement "offers highly competitive pay increases as well as favorable moving allowances for our valued dispatchers. It also extends a solid contract that continues to serve us all very well." Dietrich thanked the International Brotherhood of Teamsters (IBT), Local 210, that represents the dispatchers, and remarked on their, "hard work and commitment during the entire process."

Meanwhile, negotiations between Atlas' pilots union, the Airline Professionals Association (APA) Teamsters, Local 1224, have yet to produce mutually agreeable terms. The union also stressed that there are too few pilots to meet the long-term

demands for Atlas' major clients, including DHL and Amazon, and warned that many pilots may begin seeking work elsewhere.

In the leadup to the finalization, Robert Kirchner, Atlas Air pilot and executive council chairman of APA, Teamsters Local 1224, called on executives to "address the serious challenges that face our operations. As our pilots continue to leave due to substandard pay and working conditions, the attrition and retention issues at our airline should be a top concern and one that underscores the need to work with pilots on fair, honest solutions to these issues."



## Profits plummet at Cargolux despite robust 2016 growth

While Cargolux Airlines reported a healthy growth of 10 percent in scheduled freight tonne kilometers (FTKs) in 2016, its modest net profit of US\$5.5 million was nearly 90 percent below the \$49 million net profit figure achieved in 2015. Total revenues also fell by 5.4 percent to \$1.7 billion, compared to the previous year. Most of the discrepancy between 2015 and 2016, the carrier said, was due to unusually busy period in early 2015, caused by U.S. West Coast port congestion, plus abnormally low fuel prices that year.



Still, Richard Forson, president and CEO of the Luxembourg-based all-cargo carrier, said 2016 produced “excellent results” that were a “testament to the strength of Cargolux” and its employees, especially during the booming peak season in the fourth quarter.

Despite the “extremely volatile environment” in the global airfreight market in 2016, Cargolux said it carried more than 964,000 total tonnes of cargo via its global network in 2016, and had a vigorous fourth quarter – “one of the strongest in many years.” In November 2016, the carrier said it registered more than 12,000 block hours flown and “in excess of 96,000 tons sold.” Daily aircraft utilization for last November, with 16:74 block hours per day, was the second-highest recorded, topped only by the 16:85 hours per day in November 2013.

The 10 percent rise in FTKs last year nearly tripled the average market growth of 3.8 percent for the airfreight industry, Cargolux said. Meanwhile, its worldwide market share reached 3.9 percent. For most of the year, yields at Cargolux were “worryingly low,” the carrier said, as available tonne kilometers rose to 11.310 million. The overall load factor stood at 66.76 percent, the carrier said.

Cargolux operations to and from its hub in Zhengzhou grew significantly in 2016, making it now the largest hub in mainland China, surpassing Shanghai. Flights between Luxembourg and Zhengzhou were complemented by trans-Pacific services to and from Chicago. The airline carried more than 105,000 tonnes of freight to and from Zhengzhou during 2016, compared to 66,000 tonnes in 2015.



## UPS adds 400 ‘dangerous’ commodities to its fly list

UPS is heading into the “danger zone,” saying it is ready to handle a wider range of higher-risk goods. The express giant is now allowing an additional 400 “dangerous” commodities onto its global air network, as well as increasing the size of allowable shipment. The company is also adding more than 300 products across its ground network in Europe. The newly added items include chemicals to clean laboratory equipment, paint, compressed gases, adhesives and batteries. UPS can now help these businesses ship between 36 countries.

The change in protocol was driven by demand for shipments of products that are classified as dangerous goods. “UPS helps companies meet strict and often complex requirements when shipping dangerous goods,” said Teresa Finley, UPS Chief Marketing Officer. “Now we can meet our customers’ expanded needs for a one-stop solution to ship both conventional and dangerous goods.”

UPS has technology applications to simplify shipping packages that meet guidelines issued by the International Air Transport Association, the U.S. Department of Transportation, the European Dangerous Goods Accord, and the International Civil Aviation Organization, a specialized agency of the United Nations.

Transport of dangerous goods is tightly regulated, and UPS has been burned before. The Federal Aviation Administration slapped Amazon with a US\$350,000 fine for shipping prohibited and dangerous goods by air, following a spill of the caustic product, which sent nine UPS employees to the chemical wash after they felt a burning sensation.

## Shakeup at Virgin Atlantic as cargo boss Lloyd plans to step down

After a 30-year tenure, Virgin Atlantic’s senior vice president of cargo, John Lloyd, decided he will step down from the position this September. The veteran airfreight boss said he is resigning to pursue other, yet unspecified endeavors. “We will certainly be sad to see John go,” read a statement from Virgin Atlantic. “One of the many contributions he has made is to

build a strong team with an amazing reputation for customer service and incredibly strong customer relationships, driven by an honest and straightforward style, which our customers trust and find easy to do business with.”

The carrier also said that, “We would like to thank John for his tremendous contributions and accomplishments over the

30 years he has been with us, and we wish him all the best in the future.”

Lloyd joined Virgin Atlantic Cargo in 1987 and made a name for himself instilling customer service values into the organization, which consistently earned it the reputation as a top cargo-carrying airline. He started out as cargo operations officer at London Gatwick Airport. Lloyd got into the air cargo industry in 1986, working for Gatwick Handling in their cargo office. No replacement for Lloyd has yet been named at Virgin Atlantic.

## Amazon makes major bid to boost European warehouse market share

Amazon is in the market for 1,300 warehouse units across Europe as the e-commerce company rushes to consolidate market share for its one-hour Prime Now delivery service. The Telegraph reports that the warehouses will be set up near population centers, allowing Amazon to store high-demand items near customers.

Prime subscription services are currently available in the United Kingdom, France, Germany and Italy. In Europe, 40 percent of Prime subscribers spend more than 1,000 euros annually on shopping via the Amazon portal, compared to only 8 percent of non-Prime members.

The push into Europe also shows that Amazon is looking elsewhere to make up for slowing growth rates in its home market, where saturation is a growing obstacle. That said, existing U.S. customers continue to move more of their purchasing online.

Amazon does not disclose membership numbers, but it did say that membership increased by 51 percent in 2016. International growth outpaced the company's domestic growth rate. Consumer Intelligence Research Partners found that there were 54 million Prime members in the U.S., and 65 million users worldwide.



## DHL Shanghai receives IATA CEIV-Pharma certification



Once unheard of in Asia, the CEIV-Pharmaceutical certification program is starting to establish beachheads, first in Singapore Airport Terminal Services (SATS), then at Changi

Airport. Now DHL Global Forwarding's airfreight station in Shanghai has joined the CEIV-certified ranks.

The 1,650-square-meter Shanghai facility features 245 square meters of space for air-export temperature-sensitive storage. The facility is part of DHL's "answer to the regulatory demands of the pharmaceutical industry," said David Bang, global head of DHL Temperature Management Solutions and CEO LifeConEx at DHL Global Forwarding.

DHL began CEIV certification for its global stations in the third quarter of 2016. Following independent audits by third parties and on-site training, the DHL Air Thermonet station in Shanghai received certification. The integrator says this improved its "transportation and storage quality levels of pharmaceutical goods."

"The life sciences and healthcare industry increasingly requires more regulatory control over the years, including the transportation and storage of highly sensitive pharmaceutical goods," said Steve Huang, CEO, DHL Global Forwarding Greater China.

In addition, temperature sensitive airfreight shipments at the Shanghai facility have the option of a door-to-door courier solution, called "Life Sciences graded Specialty Courier." Additionally, DHL offers the express service "Medical Express," with a fixed delivery time, and "DHL Clinical Trial Logistics," a logistics solution specifically designed for clinical studies, such as the transportation of trial medications, auxiliary materials and lab kits.

## Brazilian supply-chain company to launch cargo aircraft fleet

Brazilian supply-chain solution company, Modern Logistics, has the official go-ahead to operate a fleet of cargo aircraft. Modern Logistics plans to scale up to 15 logistics centers and a fleet of 32 aircraft in the next few years.

Modern Logistics, the company in question, offers third-party logistics solutions via an integrated logistics platform with multimodal transport and distribution centers located throughout South America's largest economy.

Brazil's civil aviation regulator ANAC (Agência Nacional de Aviação Civil) granted the requisite Air Operator Certificate (AOC) earlier this month, allowing the company to "fill the infrastructure gap," and fly freighter aircraft where "service and infrastructure are lacking, and complement its network capabilities with strategic partners."

With Brazil's economy starting to show signs of a recovery, Gerald Blake Lee, Modern Logistics' CEO said that it was a good time to launch the venture. Marlon Ramirez, the company's CFO added that "With the AOC in hand, we plan to add at least two Boeing 737 freighter aircraft by the end of the year." He added that, "With a fleet of three aircraft, we will be able to meet initial client demand in the North, Southeast, Northeast, and Central-West regions of the country, in accordance to the needs of our clients."

Modern Logistics operates in Brazil's established industrial regions and distributes products nationwide, equipped. The company specializes in developing logistics solutions for industries in various sectors including pharmaceutical, medical equipment, cosmetics, electronics, components, retail and other sectors requiring efficient, high quality supply-chain solutions.

## Voyageur Aviation unveils first Dash 8-100 freighter conversion



Canadian aerospace company, Voyageur Aviation Corp. rolled out the first-of-its-kind Dash 8-100 Package Freighter (PF) conversion aircraft. The Dash 8-100 PF carries an average payload of 4.5 tonnes, and has 39 cubic meters of cargo space. The aircraft's 1.27-meter x 1.52-meter cargo door, and low door sill height of 1.02 meters, facilitates loading without specialized equipment. The aircraft is also equipped with a reinforced cargo floor and an advanced LED interior lighting system.

The first two of its Dash 8-100 PF conversions are being delivered to Wasaya Airways of Thunder Bay, Ontario. Wasaya's aircraft support communities in northern Canada, where the Dash 8-100 PF is well-suited for the range and unpaved runways in rural communities. The Dash 8-100 boasts short take-off and landing capabilities, and a range of up to 800 nautical miles, fully loaded, making the aircraft a strong candidate for feeder networks for small package and express freight.

## CARGOLUX GROUP POSTS US\$5.5M NET PROFIT FOR 2016

The Cargolux Group made a net profit of US\$5.5 million in 2016, a year-on-year decrease of 88.8%, according to results released by the airline. The group carried 964,131 tonnes of cargo in the year, 8.4% more than in 2015. Freight tonne kilometres also grew by 10% year-on-year, gaining the carrier the number-six spot in the International Air Transport Association's ranking of cargo carriers in terms of international scheduled FTKs. Available tonne kilometres increased to 11.3 million and the overall load factor rose from 65.9% to 66.76%. Global market share grew by 0.1 percentage point to 3.9%.

"The excellent results for 2016 are testament to the strength of Cargolux and the dedication and passion of our employees who deserve special recognition for their effort and hard work, especially during the last quarter," said Richard Forson, president and CEO. "They have enabled the airline to perform all flights as planned and deliver on our service quality promise towards our customers, who, in turn, continue to support us with their loyalty and trust. The success of Cargolux is truly a team effort and that is exactly the way it should be."

During the year, the airline boosted its presence in Zhengzhou and carried a total of more than 105,000 tonnes of freight to and from the city, a year-on-year increase of 59%. Cargolux took delivery of its 14th Boeing 747-8F in September 2016, bringing the fleet to 10 747-400Fs, two 747-400ERFs and 14 747-8Fs. The group flew 122,575 block hours, 6.7% more than 2015, and the average daily utilization of the fleet was 14:35 hours, according to Cargolux.

## United, Lufthansa Cargo JV to share freight capacity, booking, handling

Finally, some good news regarding United – United Cargo, that is. After two years of negotiations, United Cargo and Lufthansa Cargo entered into a joint venture this month, covering a wide-range of cargo cooperation on routes between the United States and Europe. The trans-Atlantic deal, first proposed in 2015, covers cooperation on available capacity and alignment of booking and handling processes.

The carriers' shared routes include more than 600 direct connections per week between the U.S. and Europe. The combined network offering creates additional allows booking through either carrier's booking channels, as well as coordinated handling and transfers.

Peter Gerber, Lufthansa Cargo's CEO, said the deal was based on compatible "continental and trans-Atlantic networks, our hubs and our fleet complement each other effectively." Jan Krems, president of United Cargo, added that, "Cargo customers will appreciate the opportunities for quicker and easier shipping between key locations in the U.S. and Europe."

We weren't going to go there, but this article is about United, and it's worthwhile pointing out that inanimate cargo seems to be doing far better than the living variety these days. In fact, they just can't seem to drag it on fast enough. First-quarter results for the American carrier showed cargo revenues up 13.4 percent, to US\$220 million, and revenue tonne miles up 20.3 percent to 748 million. Taken in conjunction, these numbers suggest that United is still riding a turnaround that got underway sometime in 2014, following years of lackluster results.



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Interview City	Position	Date	Time	Venue
Gurgaon (ISC)	Cabin Crew	8-May-17	10 am - 12 pm	InterGlobe Aviation Limited ("IndiGo"), Level 2, Tower C, Global Business Park, MG Road
Gurgaon (ISC)	Cabin Crew	15-May-17	10 am - 12 pm	InterGlobe Aviation Limited ("IndiGo"), Level 2, Tower C, Global Business Park, MG Road
Gurgaon (ISC)	Cabin Crew	22-May-17	10 am - 12 pm	InterGlobe Aviation Limited ("IndiGo"), Level 2, Tower C, Global Business Park, MG Road
Gurgaon (ISC)	Cabin Crew	29-May-17	10 am - 12 pm	InterGlobe Aviation Limited ("IndiGo"), Level 2, Tower C, Global Business Park, MG Road



### ELIGIBILITY CRITERIA

- Female Indian nationals, with Indian Passport, between 18 to 27 Years of age.
- Educational Qualification : Passed 10+2 examination, from a recognized Board or University.
- Communication : Fluency and clarity of speech in English and Hindi.
- Height : Minimum of 155 cms, with proportionate weight, as per BMI.
- Appearance : Clear skin, positive body language and well groomed. No visible scars or tattoos.

### REQUIREMENTS

- Please wear a Half-sleeve Shirt and a knee length well fitted Skirt with black Stocking.
- Candidate must carry, a passport size photograph, 10th and 12th Mark Sheets from a recognised Board or University, Photocopy of Pan Card or Passport.
- Carry a copy of your updated resume.

### Required Skills:

Pleasing personality with an unblemished complexion and good body language. Excellent verbal and written communication skills in both Hindi and English. Confidence and ability to handle passengers and provide only the best customer service. Open to relocation to any part of the country. Must possess a valid Indian passport.

### Eligibility Criteria:

Educational Requirements: 10+2 , Age: 18-27 yrs (Relaxed for experienced crew)

**Height:** Minimum 155cm (Females); Minimum 173cm (Males), Weight: In proportion to height.

**Eyesight :** 6/6, Acceptable limit - +/- 1.5.



CITY	INTERVIEW DATE	TIME (HRS)	VENUE
Mumbai	5-May-17	10:00 – 14:00	Holiday Inn, Sakinaka Junction, Andheri Kurla Road, Andheri East, Mumbai - 400072.
Delhi	8-May-17	10:00 – 14:00	Essex Farms, 4, Aurobindo Marg, Near IIT Flyover, New Delhi.
Mumbai	12-May-17	10:00 – 14:00	Holiday Inn, Sakinaka Junction, Andheri Kurla Road, Andheri East, Mumbai - 400072.
Delhi	15-May-17	10:00 – 14:00	Essex Farms, 4, Aurobindo Marg, Near IIT Flyover, New Delhi.
Mumbai	22-May-17	10:00 – 14:00	Holiday Inn, Sakinaka Junction, Andheri Kurla Road, Andheri East, Mumbai - 400072.
Delhi	22-May-17	10:00 – 14:00	Essex Farms, 4, Aurobindo Marg, Near IIT Flyover, New Delhi.
Kolkata	26-May-17	10:00 – 14:00	Hotel Novotel and Residencies, CF – 11, Action Area 1C, New Town, Rajarhat, Kolkata - 700 156
Delhi	29-May-17	10:00 – 14:00	Essex Farms, 4, Aurobindo Marg, Near IIT Flyover, New Delhi.
Bangalore	31-May-17	10:00 – 14:00	The Park, 14/7, MG Road, Bangalore - 5600 42.

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City	Interview Date	Time (Hrs)	Venue
Delhi	May 5, 2017	1000 hrs to 1400 hrs	Constitution Club of India, Rafi Marg, New Delhi
Dehradun	May 5, 2017	0900 hrs to 1300 hrs	IMS Unison University, Makkawala Greens, Mussoorie Diversion Road, Dehradun.
Mumbai	May 6, 2017	1000 hrs to 1400 hrs	Kaledonia (HDIL Building), 4th Floor, Off Western Express Highway, Sahar Road, Andheri East, Near Andheri East Railway Station. Mumbai.
Chandigarh	May 8, 2017	0900 hrs to 1300 hrs	The Golden Plaza Hotel, Paras Downtown Square Zirakpur, Chandigarh.
Jaipur	May 8, 2017	0900 hrs to 1300 hrs	Hotel Royal Orchid, Tonk Road, Durgapura, Jaipur.
Pune	May 9, 2017	1000 hrs to 1400 hrs	Novotel, Pune Nagar Road, Weikfield IT Infopark, Survey No. 30/3, Ramwadi, Viman Nagar Pune.
Amritsar	May 9, 2017	1100 hrs to 1400 hrs	Holiday Inn Amritsar, District Shopping Complex, Ranjit A, Amritsar.
Goa	May 9, 2017	0900 hrs to 1300 hrs	Institute of Advanced Management, Indismart Woodbourne resort, Gonvoloy, Nuvem, Salcete, Goa.
Lucknow	May 10, 2017	0900 hrs to 1300 hrs	Comfort Inn, TC-75, Vibhuti Khand, Gomtinagar, Lucknow.
Varanasi	May 11, 2017	1000 hrs to 1400 hrs	Hotel Amaya, The Mall Road (cantt), Varanasi.
Kolkata	May 12, 2017	1000 hrs to 1400 hrs	The Circle Club, Crossing of VIP Road, Rajarhat, New Town Express Way, Opposite Charnock Hospital, Kolkata Airport, Kolkata.
Guwahati	May 16, 2017	1000 hrs to 1400 hrs	Indian Skills Academy - Level 5. Boraj Arcade, Opposite Ayursundra Hospital, Near Guwahati Eye Clinic, GS Road Ulubari, Guwahati.
Siliguri	May 17, 2017	1000 hrs to 1400 hrs	Club Montana Vista, By Conclave E Zone, Uttorayon, New Township, Matigara NH 31, Siliguri.
Mumbai	May 20, 2017	1000 hrs to 1400 hrs	Kaledonia (HDIL Building), 4th Floor, Off Western Express Highway, Sahar Road, Andheri East, Near Andheri East Railway Station. Mumbai.
Delhi	May 22, 2017	1000 hrs to 1400 hrs	Constitution Club of India, Rafi Marg, New Delhi

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- Valid ICAO ATPL or frozen ATPL (ATPL theory passes/credits)
- Valid instrument rating (IR)
- Valid class one medical
- English language proficiency level 4 or above
- Minimum of 1,000 hours multi crew, multi-engine jet commercial airline experience
- Type-rated and currently flying on the A380 with 500 hours minimum on type

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