Vol **04** Issue **03** DECEMBER **2017** ₹ 100 www.aviationmagazine.in







March 8-11, 2018 | Begumpet Airport, Hyderabad, India

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SUBSCRIPTION

Asst.Manager, Subscription : Naheda 040-42215553

Sr.Customer Support Officer: Sony

FINANCE & ADMINISTRATION

Sr.Manager: Karunandhi Asst.Manager: Md. Wajid Ali

Editionial & Advertising Offices

Aviation Update

16-11-741/6/E/50, S.B.H COLONY, DILSUKHNAGAR, HYDERABAD-500 060. India. Tel: 09444499221, 040-42215553.

Subscription/Circulation

Annual Subscription: 1200 INR - 12 Issues

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Printed at: Chennai offset printers 19/1 & 21/2 Kitabath Khan Bhadur Street, Elliess Road, Mount Road, Chennai - 600 002

Aviation Update is published by - B.Kartikeva No:27/11, V.O.C. Street, T. Nagar, Chennai -600 017



When you are content to be simply yourself and don't compare or compete, everyone will respect you

Greetings and Salutations

Dear Readers.

We are delighted to inform our readers that we actively and successfully made our presence felt at Dubai Air show 2017 participating as media. The hospitality of Dubai is unmatched and so was the grandeur of the event. With participation of top notch aviation industry professionals from around the globe, the event was prominent for the growth of Middle Eastern aviation industry.

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.

You will find an exclusive interesting interview with Aviation Update Dr.Guruprasad Mohapatra, Chairman, AAI, about its key initiatives, current priorities and future plans.

Aviation update along With AAI officers' Association (AAOA (I)) conducted a "DISHA-2017: " -A FUTURISTIC LOOK INTO CNS/ATM SYSTEMS. We would like to express our gratitude to entire fraternity of AAI.

We are happy to be associated with on a lighter note we are approaching the end of another wonderful year which has many ups and downs, many victories and challenges, many smiles and sorrows, many hits and misses. As we are all set in to step in a new year. Aviation Update resolves to serve its readers the best content on the aviation industry in the coming year as well. We aspire to receive the support of all our subscribers and their faith in our potential.

Thanks

Kestinapole. B. Kartikeya Editor

VISTARA INTRODUCES CUSTOMIZABLE HOLIDAY PACKAGES WITH 'VISTARA GETAWAYS'



Vistara, India's finest full-service carrier, announced the launch of 'Vistara Getaways', a one stop shop for usercustomizable holiday packages covering flights, hotels, cars, and sightseeing options, with all of the flexibility that is expected by discerning experienced travellers, at package prices much more attractive than purchasing the various components individually.

Customers can choose holiday packages for as many as 35 cities in and around Vistara's network of 21 destinations, at getaways.airvistara.com. The packages include convenient air travel options on Vistara, airport transfers as well as car rental options, and carefully curated sightseeing tours, and hotel stays at the best properties in partnership with leading hotel chains such as Taj, Hyatt, Radisson, Le Meridien, and upscale boutique hotels. In addition, 'Vistara Getaways' offers great flexibility to travellers, enabling them to personalize their holiday packages by choosing the duration of holidays, their preferred cabin class for air travel, options to upgrade hotels and the category of rooms, and even upgrade the choice of cars for local transportation. Customer can even choose to split their stay in a city in more than one hotel. As a part of 'Vistara Getaways', Vistara offers travel support to its customers at all times – before, during or after holidays, with a dedicated helpdesk..

Commenting on the launch of Vistara Getaways, Mr. Sanjiv Kapoor, Chief Strategy & Commercial Officer, Vistara, said, "Planning the perfect holiday involving air, hotel, car, and sightseeing options can be an arduous and time-consuming task. With Vistara Getaways, the globally experienced discerning travelers of today are assured of having all their holiday needs met via a convenient, online one-stop-shop, and more importantly, with attractive pricing and great flexibility to design their holidays the way they want it, very unlike traditional packaged holidays. The introduction of Vistara Getaways is in line with our promise of providing more options along with a seamless world-class travel experience to our customers."

As part of the launch, Vistara is offering an inaugural discount of flat INR 4,000/- on the holiday package price for the first 100 customers of Vistara Getaways. The discount is available using the promo code 'FIRST100'.

■ SPICEJET REGISTERS 11TH CONSECUTIVE PROFITABLE OUARTER



SpiceJet reported a profit of INR 105.3 crore for the three months ended September 30th, 2017 as against INR 58.9 crore in the same quarter last year, making it the 11th successive profitable quarter for the airline. In the seasonal weak quarter, profits grew by 80% against a capacity growth of 22% during this period as against the same quarter last year. This is SpiceJet's highest Q2 profit in its history of operations.

SpiceJet reported operating revenue of INR 1814.3 crore in the quarter. On an EBITDA basis, SpiceJet reported a profit of INR 180 crore. On an EBITDAR basis, the Company reported a profit of INR 421.6 crore.

SpiceJet yet again excelled on operational parameters to report the highest passenger load factor amongst all airlines

in the country all through the quarter. The company witnessed a 7% increase in its passenger yields (Revenue per Available Seat Kilometer) while its average load factor across the network was 93.1%. SpiceJet has recorded more than 90% load factor for 30 successive months, a feat unparalleled globally. Significantly the quarter also marked the fifth consecutive month when the airline's domestic load factors have been in excess of 94%.

Mr. Ajay Singh – CMD, SpiceJet said, "This has been yet another great quarter for us and I am very pleased with the exceptional performance of my team. Every quarter SpiceJet has a story which further underscores our extraordinary turnaround." "We launched new flights on maiden routes and further emphasized our commitment for UDAN as we introduced our fourth daily flight under the scheme. Even with eleven successive profitable quarters, pathbreaking initiatives, record aircraft orders and exploring new growth avenues through UDAN, I can say that we have just begun."

CDB AVIATION DELIVERS FIRST OF 14 NEW GO AIR'S A320NEOS



DB Aviation Lease Finance (CDB Aviation), a wholly owned Irish subsidiary of China Development Bank Financial Leasing (CDB Leasing), announced the delivery of a new Airbus A320neo aircraft to India-based, low-cost carrier Go Airlines (GoAir).

The aircraft is the first of a total of 14 A320neos to be delivered to GoAir. The program is expected to run through the end of 2019, with the initial five aircraft to be delivered by the end of 2017. The aircraft will join the carrier's all-A320 fleet and will be operated on its domestic network

that connects prominent business metros and leisure destinations across the Indian subcontinent.

"We are very delighted to execute a purchase and leaseback program with GoAir that represents such a large-scale transaction. The 14 aircraft fleet requires the support of an established, full-service platform and CDB Aviation is well positioned to deliver the platform to the market that has the required resources, expertise, and capabilities," said CDB Aviation President and Chief Executive Officer Peter Chang. "The completion of this transaction further demonstrates CDB Aviation's steadfast commitment to executing our strategy to secure and build a fleet of the latest technology aircraft and engines to offer airlines the ideal fleet options they seek, one aircraft or an entire fleet at a time".

"From our firm order of 144 A320neos we are delighted to have completed a 14 aircraft sale-leaseback program with CDB Aviation," said Jeh Wadia, Managing Director, GoAir. "We appreciate the opportunity to work with CDB Aviation and look forward to further optimizing our fleet through our longterm partnership".

INDIGO, OPERATIONAL PROFIT UP BY 27% IN Q2, 2018



InterGlobe (IndiGo) reported its second quarter fiscal year 2018 results, revenue from operations of \$818.87 million for the quarter ended September 2017, an increase of 27.0% compared to the same period last year.

Profit before Tax was \$118.323 million and Profit After Tax was \$85.36 million. According to the IndiGo's statement, the profitability for the quarter was favorably impacted due to better revenue management compared to last year as well as credits received from Pratt

& Whitney and Airbus related to aircraft groundings and delivery delays.

The company also disclosed EBITDAR of \$244.7 million and margin was 29.9% for the quarter ended September 2017, compared to EBITDAR of \$151.270 million and margin of 23.5% for the same period last year. Basic Earnings per share was \$0.24 for the quarter ended September 2017.

"We have posted a good quarter both in terms of profitability and operational performance and have once again been ranked number 1 in on time performance," said Aditya Ghosh, InterGlobe President and Whole-time Director. "We achieved another significant milestone in our journey by completing a successful equity offering of over INR 37 billion to increase our public shareholding."

Following the release of the second quarter report, the third quarter fiscal 2018 year over year capacity increase in ASKs is now expected to be 14%, while the full year fiscal 2018 year over year capacity increase in ASKs is expected to be 19%.

IndiGo operates a fleet of 141 aircraft of which 24 are A320neos, to 46 destinations including 7 international cities, performing of 913 daily flights during the operational peak. During the second quarter, the fleet was increased by 6 aircraft.

DELTA, PAX UP BY 4.1% IN OCTOBER 2017



elta Air Lines (Delta) reported operating performance for October 2017. The company carried 16.2 million passengers across its global network in the month.

Delta, one of the major US carriers, presented its traffic results for October 2017, revealing 4.1 % revenue passenger miles increase in October 2017 compared to October 2016. Available seat miles increased

3.1 %. Load factor for October 2017 was 86%, an increase of 0.9 percentage points compared to October 2016.

During the month, the company launched Airbus A350-900 service 900 between Detroit and Tokyo-Narita and introduced automatic check-in functionality for Fly Delta app users to streamline the check-in experience for customers.

WIZZ AIR, PAX UP BY 30.5% IN OCTOBER 2017



izz Air Holdings Plc (Wizz Air) announced passenger statistics for October 2017. In October, Wizz Air increased its passenger traffic by 30.5%. The scheduled capacity also increased by 27.5%. The load factor in October 2017 was 92.1%. This was 2.1 percentage points higher compared to October 2016.

Year-to-date the scheduled capacity increased by 29.8 and the passenger traffic increased by 33.5%. Load factor increased 2.5 percentage points over last year, reaching 88.9%.

AIR ARABIA, NET PROFIT UP BY 27% IN O3 2017



ir Arabia, the Middle East and North Africa's first and largest low-cost carrier, announced strong financial results for the third quarter of this year ending September 30, 2017, revealing 27% net profit increase.

Air Arabia's financial results for the third quarter ending September 30, 2017 exceeded analysts' expectations and registered a net profit of \$102 million, an increase of 27% compared to the \$81 million reported for the same period last year. The company's turnover for the third quarter of 2017 increased by 4% to \$316 million, compared to \$305 million in the corresponding period last year. Air Arabia served over 2.33 million passengers in the third quarter of 2017, an increase of 3% compared to the same period of last year while the average seat load factor – or passengers carried as a percentage of available seats – for the same quarter stood at an impressive 81%

"The solid third quarter results reflect the continuous appeal for our value driven product combined with the cost control measures and robust growth strategy adopted by the airline management team," said Sheikh Abdullah Bin Mohammad Al Thani, Chairman of Air Arabia. "We are glad to see Air Arabia delivering strong financial and operational performance throughout 2017 despite the continuous pressure on yield margins that airlines in the region are witnessing."

Air Arabia's net profit for the first nine months of 2017 stood at \$173 million, up 18% compared to the corresponding period of 2016 while the turnover for the first nine months of this year reached \$784 million. Air Arabia served over 6.5 million passengers in the first nine months of 2017 while the average seat load factor — or passengers carried as a percentage of available seats.

CDB LEASING FINALIZE ORDER FOR 52 737 MAXS AND 8 787



B oeing and CDB Aviation finalized an order for 42 737 MAX 8s, 10 737 MAX

10s and eight 787-9 Dreamliners. The order, valued at \$7.4 billion at current list prices, was announced as a Memorandum of Understanding (MOU) at the 2017 Paris Air Show. The order includes a conversion of six 737 MAX 8 orders, to the 737 MAX 10.

CDB Aviation, one of the largest and most influential Chinese-owned aviation leasing companies, is part of the launch customer group for the 737 MAX 10, the newest member of Boeing's 737 MAX family.

"The 737 MAX and the 787 Dreamliner are some of the most advanced, most fuel-efficient airplanes in the world today," said CDB Aviation President and Chief Executive Officer Peter Chang. "We're confident that the reliability, efficiency and superior economics of the MAX and Dreamliner families will be very appealing to our customers."

Based in Dublin, Ireland, CDB Aviation operates as a wholly owned Irish subsidiary of China Development Bank Financial Leasing (CDB Leasing) and features a committed fleet of over 300 aircraft. "CDB Aviation is a leader in the leasing market and we're excited the 737 MAX and 787 Dreamliner will be the pillars of its growing fleet," said Boeing Commercial Airplanes President & CEO Kevin McAllister.

"Being one of the launch customers of the MAX 10 and bringing the MAX family's orders over the 4,000 milestone further demonstrates CDB Aviation's steadfast efforts to advance its global mission and deliver the latest technology aircraft to current and prospective customers," added Chang.

AMERICAN'S SYSTEM ERROR LEAVES THOUSAND FLIGHTS WITHOUT PILOTS



A software glitch of American Airlines
left thousands December 2017

flights without assigned pilots during "the upcoming critical holiday period," the carrier's pilot union stated on November 28, 2017. The airline's management told its employees by email that software error gave time off to too many pilots between December 17 and 31. The error caused the scheduling system to show sufficient staffing coverage for planned flights and allowed pilots dropping some trips they had been assigned, when in fact there were not enough crew members willing to pick up the flights, American spokesman Matt Miller told Bloomberg.

As a result, over 15,000 planes currently lack pilots, according to the Allied Pilots Association that represents American Airlines pilots. "This is certainly not routine," Dennis Tajer, spokesman for Allied Pilots Association, told Bloomberg. "This is a crisis right now, and in that crisis, [American Airlines has] gone solo."

American Airlines said in a statement that it is working diligently to address the issue and expects to avoid cancellations during the holiday season. "We have reserve pilots to help cover flying in December, and we are paying pilots who pick up certain open trips 150% of their hourly rate – as much as we are allowed to pay them per contract", the Verge quotes the carrier's spokesperson. "We will work with the APA to take care of our pilots and ensure we get our customers to where they need to go over the holidays."

The pilot union reacted by saying that "neither APA nor the contract can guarantee the promised payment of the premium being offered," and called it "violation of the contract."

The union claims that the airline has to look for a way out only in collaboration with APA."Here's hoping the folks running the airline come to us and are willing to sit down and work through it because we don't have a solution at this point," Gregg Overman, a spokesman for APA, told the New York Times.

According to Bloomberg, flights that are scheduled without a captain, first officer or both originate from American's largest hub Dallas-Fort Worth Airport and airports in Boston, Miami, New York, Philadelphia, Salt Lake City and Charlotte, North Carolina.

AIR FRANCE-KLM AND JET AIRWAYS SIGN AN ENHANCED COOPERATION AGREEMENT



ir France-KLM and Jet Airways signed a landmark 'Enhanced Cooperation Agreement' for the development of their operations between Europe and India. A first in the history of Indian aviation, this agreement strengthens the partnership built between the three airlines since 2014. This cooperation was expanded in 2016 with an extensive code-share agreement for connections between Europe and North America and Jet Airways' hubs at Mumbai and Delhi in India via Air France-KLM' hubs at Paris-Charles de Gaulle and Amsterdam-Schiphol.

Jean-Marc Janaillac, Chairman and CEO of Air France-KLM stated: "Air France-KLM and Jet Airways are launching the first cooperation agreement of its kind on the India – Europe market, one of the markets at the heart of the group's strategy for the coming years. We are innovating within the airline industry by offering connections between two partnerships for the first time: our enhanced cooperation agreement for India - Europe with Jet Airways and the Air France-KLM and Delta Air Lines' Europe -North American joint venture. Jet Airways, Air France, KLM, and, Delta Air Lines will thus connect India to a vast transatlantic network via the Paris-Charles de Gaulle and Amsterdam-Schiphol hubs". He also added: "With over 1,200,000 customers carried between India and Europe by the Group and our Indian partner, half of whom are travelling onward to North America, we are confirming our ambition to offer customers an enhanced network, and a unique, seamless product tailored to their needs with the best products and services".

"The enhanced cooperation agreement between Jet Airways, Air France and KLM being signed during Jet Airways' 25th Year and Air France's 70 Years in India, represents the next stage in our journey of offering our valued guests greater choice, connectivity, and comfort across our combined global networks. I am excited for the future, as we move forward with this historic development and the exciting new value proposition which will drive tremendous benefits to our customers." said Naresh Goyal, Chairman Jet Airways.

SPICEJET
 ANNOUNCES
 NEW NON-STOP
 FLIGHTS ON
 DOMESTIC AND
 INTERNATIONAL
 ROUTES



SpiceJet has announced a slew of new non-stop flights on both domestic and international routes this winter beginning December 2017. The airline is all set to start operating the first ever daily direct flight on the Ahmedabad-Bangkok sector from 7th December 2017. SpiceJet is also the first airline to introduce daily non-stop flights on Jaipur-Jodhpur, Surat-Jodhpur, Ahmedabad-Varanasi and Bengaluru-Bagdogra sectors.

Additionally, SpiceJet announced the launch of additional frequencies on Bengaluru- Ahmedabad, Bengaluru- Kolkata, Chennai – Goa, and Surat – Goa sectors and a seasonal nonstop flight on the Delhi-Port Blair route.

SpiceJet will be commencing operations on the Ahmedabad-Varanasi, and the Ahmedabad-Bangkok routes effective 7th December 2017. While the flight on the Ahmedabad-Varanasi route will be operational on all days except Sunday, the

airline will be operating a daily flight on the Ahmedabad-Bangkok route. The airline has also launched a new daily direct flight on the Ahmedabad-Bengaluru route effective O1st December 2017, thus connecting the financial capital of Gujarat with other domestic and international destinations.

SpiceJet will launch two direct flights from Bengaluru effective 1st December 2017. The airline will be operating an additional frequency on the Bengaluru-Kolkata route and it has added a new flight on the Bengaluru-Bagdogra route. While the airline will be operating a daily flight on the Bengaluru-Kolkata, the new flight on the Bengaluru-Bagdogra route will be operational on all days except Tuesday.

The new flights introduced on the Goa-Chennai, Surat-Goa, Jaipur-Jodhpur and Jodhpur-Surat routes will be operational on all days effective 07th December 2017 and the airline will be deploying its Q400 fleet on these routes. However on the Delhi-Port Blair seasonal route, SpiceJet will be deploying its Boeing fleet with the new flight being operational daily effective from 10th December 2017 to 9th February 2018.

The new Surat-Jodhpur flight will give a boost to the textile traders while giving tourists a one stop convenient connection between Jodhpur and Goa via Surat. With the introduction of the new Varanasi-Ahmedabad flight, Varanasi will now have convenient connections to Bangkok, Dubai, Muscat and Goa via Ahmedabad.

Ms. Shilpa Bhatia, Chief Sales & Revenue Officer SpiceJet, said, "Adding new flights, new frequencies, scaling up operations and enhancing our overall network will remain a constant endeavour for us at SpiceJet as we eye new growth markets. The slew of new flights will be a delight for our customers across metro and non-metro cities offering additional flying options and travel flexibility."

AVIAAM LEASING FINALIZES TWO NEW AIRBUS DELIVERIES

A viaAM Leasing, a Warsaw Stock Exchange listed aircraft leasing

company, has recently handed in two brandnew Airbus A320s to the Russian flag carrier Aeroflot. The buyer and lessor of the Airbus A320-214s aircraft is SkyCo International Financial Leasing.

In November, two deliveries of Airbus A320-214s (MSN 7902 and MSN 7932) were arranged by AviaAM Leasing. Aircraft were delivered to their new operator – the leading Russian airline Aeroflot – at Airbus facilities in Hamburg, Germany, and Toulouse, France. Under the operating lease agreement, Aeroflot will operate 150 economy and 8 business class seat configured aircraft for the next 12 years.

"We have already finalized 7 of the 8 scheduled Airbus deliveries to Aeroflot. Our partner, Aeroflot, is successfully employing the aircraft, thus we hope to continue our mutually beneficial partnership in the upcoming future as well," shared Tomas Sidlauskas, VP Development and Member of the Board at AviaAM Leasing.

SkyCo International Financial Leasing was formed in 2015 as a joint venture between Guangdong Airport Authority, Guangdong Aerocity Holding and other shareholders. It has ever since successfully started its operations in aircraft leasing market.

AZUL, PAX UP BY 12.1% IN OCTOBER 2017



B razilian airline Azul announced its preliminary traffic results for October 2017. Airline's passenger traffic (RPKs) increased 12.1% compared to October 2016 and the capacity increase (ASKs) was 7.7%. As a result, load factor was 82.9%, 3.4 percentage points higher than in the same period in 2016.

Year-to-date load factor increased 2.5 percentage points over last year, reaching 81.9%. Domestic load factor was 80.1%

and international was 90.2%. Azul is the largest airline in Brazil by a number of the served cities. It offers 755 daily flights to 104 destinations. With a fleet of 118 aircraft and more than 10,000 crewmembers, the company has a network of 197 non-stop routes as of September 30, 2017.

BOEING, AVOLON FINALIZE DEAL FOR 75 737 MAXS



Boeing and Avolon, the international aircraft leasing company, finalized an order for 75 737 MAX airplanes on November 19, 2017. The confirmed order is for 55 MAX 8s and 20 MAX 10s, with options for 20 additional MAX 8s. The agreement, announced as a memorandum of understanding at the 2017 Paris Air Show, is valued at nearly \$11 billion at list prices including the 75 firm and 20 option aircraft.

"Today's order for Boeing's newest 737 MAX airplanes will strengthen Avolon's position as a leading lessor in the global commercial aviation market," said Avolon CEO, Dómhnal Slattery. "This is the largest single order that we have placed with Boeing to date and underscores the scale of our ambition and the strength of our business. We have experienced strong interest in our initial MAX orders and this incremental order reflects this demand. With over 140 MAX aircraft now in our owned and committed fleet, we are confident that the superior economics and solid reliability of the 737 MAX family of airplanes will continue to allow our customers to grow their businesses profitably for many years to come."

"Today's order solidifies Avolon's commitment to providing their customers with the most efficient, technologically advanced airplane on the market," said Boeing Commercial Airplanes President and CEO Kevin McAllister. "We are honored that

the 737 MAX family of airplanes will become a key part of Avolon's world-class fleet as they look to leverage the surging demand for narrow-body airplanes in markets around the world."

Avolon is a leasing firm headquartered in Dublin, Ireland. It has an owned, managed and committed fleet of 915 aircraft as of September 30, 2017.

EMBRAER AND AMERICAN AIRLINES SIGN A CONTRACT FOR TEN E175S



E mbraer and American Airlines signed a firm order for ten E175 jets. American Airlines is exercising its purchase rights from its original contract with Embraer signed in 2013. This new order is in addition to the one placed in April for four aircraft and is valued at \$457 million.Deliveries begin in 2018 and continue through mid-2019.

Combined with the airline's two previous orders for the E175, this new contract results in a total of 74 E175s for American Airlines. American Airlines selected Envoy, a wholly owned subsidiary of American Airlines Group to operate the ten aircraft, which will be configured with 12 First Class, 20 Main Cabin Extra, and 44 Main Cabin seats, for a total of 76 seats.

"Because of its excellent operational performance, the E175 has proven to be the right solution for American. This repeat order demonstrates the confidence that the airline has in Embraer and in the E175," said Charlie Hillis, Vice President, Sales & Marketing, North America, Embraer Commercial Aviation. "We are proud to be part of American Airlines Inc.'s overall fleet vision and are dedicated to serving their business needs."

Including this new contract, Embraer has sold more than 390 E175 jets to airlines in North America since January 2013, earning more than 80% of all orders in the 76-seat jet segment.

BOEING, CHINA ANNOUNCE 300 PLANE SALE AGREEMENT



B oeing and China Aviation Suppliers Holding Company (CASC) today signed an agreement for 300 airplanes during a ceremony in Beijing. It was part of the United States trade mission to China, and was signed by Kevin McAllister, Boeing Commercial Airplanes president and CEO, in the presence of US President Donald Trump and China President Xi Jinping.

The agreement includes orders and commitments for 300 Boeing single-aisle and twin-aisle airplanes. The airplanes are valued at more than \$37 billion at list prices.

"China is a valued customer and key partner, and we're proud that Boeing airplanes will be a part of its fleet growth for years to come," said McAllister. "Boeing and China have a strong history of working together based on great mutual respect, and these orders build on that foundation."

Boeing and China continue to work on mutually beneficial ways to grow and support the aviation market. These efforts include industrial cooperation, the development of technologies to reduce aviation's environmental impact and enhance sustainability, and continued cooperation to support the safety, efficiency and capacity of China's air transport system.

AEROFLOT TO VOTE ON LEASE OF 20 SSI-100S



The Board of Aeroflot will vote on whether to lease 20 news Sukhoi Superjet 100 aircraft by December 26, the company revealed in a statement.

Votes will be cast regarding a "large-scale deal (deals), which are aimed at leasing twenty new Sukhoi Superjet 100 aircraft between Aeroflot, VEB-Leasing and Sukhoi Civil Aircraft Company (SCAC)".

An agreement regarding the delivery of 20 SSJ-100s was signed between VEB, United Aircraft Company (UAC) and Aeroflot at the MAKS-2017 Air Show in Russia. Currently, Aeroflot operates 30 aircraft of this model.

450 NEW REGIONAL JETS EXPECTED IN MIDDLE EAST BY 2037



B ombardier Commercial Aircraft's Market Forecast 2017-2036 covering the 60 to 150-seat segment sees growth in the Middle East with expected delivery of 450 aircraft in that market segment, or four per cent of the forecast 12,550 deliveries worldwide with a total value of US \$820 billion.

The large regional aircraft category (60-100 seats) will account for 200 deliveries, while the small single-aisle category (100150 seats) will take 250 aircraft. This will result in a fleet 3.4 times larger than at present.

"We are well positioned to take advantage of a move to strict capacity management in the region," said Jean-Paul Boutibou, Vice President, Sales, Middle East and Africa, Bombardier Commercial Aircraft. "Our Q400 high-speed turboprop, CRJ700, 900 and 1000 regional jets and new C Series small single-aisle jets can meet any requirement from 60 to 150 seats with unbeatable performance, economics and efficiency. We are the only aircraft manufacturer with that capability and we look forward to working with Middle East airlines as they expand their intra-regional networks."

The Forecast says that although Middle East airlines were profitable in 2016, the trend is downward. Double-digit capacity increases in the last two years to gain market share were achieved at the expense of decreasing yields due to the emergence of low-cost carriers in the region. The U.S. attempts to curb air travel from some Middle East countries has also put pressure on the region's widebody driven business model. This will result in a slowdown of widebody aircraft deliveries.

Middle East airlines now have an opportunity to re-examine and re-balance their fleet mix in order to develop intraregional connectivity which has been largely bypassed in favor of inter-regional networks, to fit demand to capacity. Right-sizing of the fleet will lead to higher intra-regional market and penetration and improve yields, the Forecast says.

SIA, PAX UP BY 8.3% IN OCTOBER 2017

S IA Group airlines' passenger load factor (PLF) improved 4.1 percentage points to 80.8%. Passenger carriage (measured in revenue passenger kilometers) increased 8.3% compared to last year, outpacing capacity (measured in available seat kilometers) injection of 2.8%.

Singapore Airlines' PLF improved 2.8 percentage points to 80.2%. Passenger carriage increased 4.9% compared to last

year, against a 1.2% increase in capacity. All route regions improved due to stronger passenger demand. The operating landscape remains competitive and efforts to stabilize yields are ongoing.

SilkAir's system wide passenger carriage grew 24.6% year-on-year, surpassing capacity growth of 13.6%. Consequently, PLF improved by 6.5 percentage points to 73.8%, led by strong growth in demand in India, China, Thailand, Malaysia, and Australia. During the month, Silk Air launched its inaugural flight to Hiroshima on the brand new Boeing 737 Max 8 aircraft. In addition, Silk Air took over Yangon services from Scoot as part of a move intended to optimise SIA Group's resources.

Scoot recorded passenger carriage growth of 18.5%, exceeding capacity expansion of 6.0%. Consequently, PLF went up by 9.1 percentage points to 85.8%, boosted by improvements in all route regions. PLF on selected routes to India, China, South East Asia, as well as fifth freedom routes to North Asia continued to improve. During the month, Scoot took over Kuching services from SilkAir, and this expands Scoot's network to five destinations in Malaysia.

Overall cargo load factor (CLF) was 1.6 percentage points higher, with growth in cargo traffic (measured in freight-tonne-kilometers) of 1.8% against capacity reduction of 0.5%. CLF improved across all regions except Americas and Europe, as demand outpaced capacity changes.

ATR 72-500 GETS CERTIFICATION TO OPERATE IN CANADA



The ATR 72-500 aircraft received the certification from Transport Canada, the

Canadian airworthiness authority, enabling Canadian airlines to operate the turboprop either in passenger or cargo configuration.

"Obtaining this certification will allow us to expand the operational scope of our family of aircraft", stated Alessandro Amendola, Senior Vice President Engineering at ATR. "Once again, ATRs have proven that they are the perfect match for challenging markets, such as Canada, where their ability to fly in extreme cold, icy weather conditions, take off and land on unpaved and short runways, and their unrivalled performance are invaluable."

As of today, about 40 ATR aircraft are operated in Canada. For instance, the Canadian operator First Air has already been operating the 50-seater version of the same series – the ATR 42-500 – for the past years, in the North of Canada.

The ATR 72-500 will bring further opportunities for passengers as well as cargo air services, the company announces. ATR 72-500 is powered by PW 127M engines, has the passenger capacity of 68-78 seats and maximum payload of 7,000 kg. Its take-off power is 2,475 SHP per engine, maximum range at full passenger capacity 824 nautical miles, while the maximum take-off weight is 23,000 kg.

SOUTH AFRICAN SAFAIR AND AIRLINK APPLY FOR MERGER PERMISSION



A irlink and Safair, two South African aviation groups, are planning a merger under an umbrella of the Airlink group. The move is anticipated to create economy of scale for the Airlink group, by sharing costs, optimizing assets, offering more flight destinations using shared networks, and removing system duplications.

Under the agreement, Safair group, including its LCC FlySafair and various other businesses such as humanitarian aid flights, would become part of Airlink, but sustain its brands, products, aircraft fleets and personnel. No job losses are foreseen at the moment and Elmar Conradie, the CEO of Safair and Rodger Foster, the CEO & MD of Airlink are to keep their roles.

"Airlink's acquisition of Safair, which is financially robust and profitable, makes good business sense," said Airlink CEO and Managing Director, Rodger Foster. "It presents opportunities to reduce our combined costs, position ourselves for growth while at the same time increasing connectivity and choice while making air travel accessible and affordable for our customers across Southern Africa".

As part of the merger, Safair shareholder ASL Aviation Holdings would become a minority shareholder of the Airlink Group of companies. The deal would not affect Airlink's existing SAA franchise partnership.

Under South African law mergers and acquisitions of this nature need to be approved by the Competition Commission. The companies anticipate the Commission's decision by March 2018.

MANDARIN AIRLINES STOCKS UP ON ATR 72-600 TURBOPROPS



andarin Airlines, a subsidiary of Taiwan's flag carrier China Airlines, received the first new ATR 72-600 aircraft in a series to be delivered by the leasing company Aviation. The delivery by Aviation is the first in a series of new ATR 72-600 aircraft which will be delivered to Mandarin Airlines before the end of the year under leases at market rates for the lease term of 8 years.

"This is a milestone for the Company as it is the 30th new ATR 72 that the Company has taken delivery of," said Jeff Chatfield, Aviation Executive Chairman. We are satisfied with the financial returns provided by the ATR 72 aircraft type. Globally the ATR 72-600 is the most popular regional turboprop aircraft and provides our airline customers with the most cost effective and environmentally friendly solution for regional airlines. We are also proud to be associated with Mandarin Airlines and the China Airlines Group and we look forward to developing our partnership in future".

Besides the contract for the aircraft, ATR also announced being "willing to provide" engineering and technical support to China Airlines and its subsidiaries to set-up in-house capabilities for ATR heavy maintenance, up to C-checks.

"The ATR 72-600 features several strengths, with fuel-efficiency as the major point," said Jenny Tsao, President of Mandarin Airlines. "These enable Mandarin Airlines to operate domestic flights with higher efficiency and more profitability. With ATR 72-600s joining the fleet, Mandarin Airlines will significantly increase the flight frequencies on each domestic route and then introduce some potential new sectors afterwards. The ATR 72-600 contributes to increased flight frequencies so as to enhance passenger service, allowing passengers to benefit from, for example, three to five daily flights instead of one to two daily currently. Intensive flight frequency is a main goal as we introduce ATRs into our market."

"It is always a special moment when we welcome a new operator into our fleet," commented ATR's Chief Executive Officer Christian Scherer. "After careful consideration of all alternatives Mandarin Airlines have chosen the best aircraft in regional aviation, the ATR – which is most gratifying. When this choice is made by a national flag carrier, namely China Airline's Mandarin, we are all the more honored".

OKAY AIRWAYS ORDERS FIVE BOEING 787-9 DREAMLINERS

Airways, a Chinese privately-owned airline, signed an agreement with

Boeing for five 787-9 Dreamliners, worth approximately \$1.4 billion at list prices.

"We are committed to investing in our aircraft fleet in order to keep growing ahead of the market and enhancing our customers' flying experience," said Li Zongling, Okay Airways President, as quoted by Xinhua. The purchase of the Dreamliners will allow the carrier to expand its network with long-haul routes.

Okay Airways operates an all-Boeing single-aisle jetliners fleet of 24 aircraft (as of September 2017) and mainly flies routes in China and neighboring countries in East and Southeast Asia, including Japan, Vietnam, Korea, Indonesia, and Thailand.

The Boeing 787-9 Dreamliner is a wide-body twin-aisle jetliner that can accommodate 290 passengers and fly up to 7,635 nautical miles (14,140km) distances.

AIRBUS COMPLETES SALE OF VECTOR AEROSPACE TO STANDARDAERO



Vector is a global aerospace maintenance, repair and overhaul company, providing responsive, quality support for turbine engines, components and fixed- and rotarywing aircraft. A truly international company, it generated revenues of over US\$700 million in 2016 and employs approximately 2,200 people in 22 locations across Canada, the United States, the United Kingdom, France, Kenya, South Africa, Australia and Singapore.

The newly combined company, which will maintain the name of Standard Aero, has more than 6,000 employees in 42 locations across five continents, with annual revenues of approximately US\$3 billion.

"We are excited to join forces with the Vector team in becoming one of the largest

MRO companies in the world," said Russell Ford, CEO of Standard Aero. "Our combined organizations are better positioned to provide the industry with more global services, expanded MRO capabilities and operational benefits to deliver faster, higher quality solutions to our combined customers worldwide. We look forward to joining together with the Vector leadership and employees as we begin to integrate our two organizations."

Standard Aero is a global independent provider of services, including engine and airframe maintenance, repair and overhaul, engine component repair, engineering services, interior completions and paint applications. Standard Aero serves a diverse array of customers in business and general aviation, airline, military, helicopter, components and energy markets.

CHINA'S 1ST ELECTRIC PLANE MAKES MAIDEN FLIGHT

n advanced version of China's first electric plane made its maiden flight on recently, extending the single flight time to two hours from around 45 minutes. The two-seater aircraft, the RX1E-A, designed by Shenyang Aerospace University, performed the task at around 3 pm at Caihu airport in Shenyang, capital of Northeast China's Liaoning province.

The extended endurance of the plane will help it tap into markets in the United States and Europe, according to Zou Haining, deputy head of Liaoning General Aviation Academy. In addition, the improved aircraft is equipped with a new parachute that enables safe landing of both pilot and plane.

With a maximum speed of 160 km per hour, the aircraft can be used in pilot training, passenger transportation, tourism and aerial photography. Mass production of the first-generation type, RX1E, started in early 2016.





HAECO Hong Kong Rolls Out Mobile App for Light Maintenance

Hong Kong Aircraft Engineering (HAECO Hong Kong) has rolled out a new mobile application into its light maintenance operations at Hong Kong International Airport as part of its strategy for a paper-free operation. Mobile Mechanic, developed with U.S.-based asset management and logistics software specialist Ultramain, will be introduced across the business immediately and utilized by airline customer Cathay Pacific.

The Hong Kong carrier, which is a recipient of HAECO Hong Kong's light maintenance services for its Boeing 777-300 fleet, will use the Mobile Mechanic application and system immediately following input on the project's development. The application will allow technicians to access electronic task cards, receive job assignments, create nonroutine task cards as well as sign off task



cards electronically through mobile devices.

The devices will also allow Cathay Pacific access to real-time monitoring of specific job statuses while helping users plan maintenance tasks more effectively. HAECO Hong Kong estimates that the introduction of the app will save 640,000 sheets of paper annually for the airline, which it handles an estimated 1,000 light maintenance checks for annually.

"We are confident that this application will help increase productivity and minimise the impact on the environment in which we operate," Clement Lam, director and general manager at HAECO Hong Kong said of the Mobile Mechanic application.

Both parties are already looking to extend the application's reach, with plans to cover Cathay Pacific's Airbus A330 fleet in the first half of next year.

Magnetic MRO extends engine repair capability

agnetic MRO has further extended its engine repair capability by adding Top Case Repair and Bushing Replacement to its current service offering. As of October 20, 2017, the company has extended its capability across the CFM56 range of engines including CFM56-3, CFM56-5 and CFM56-7, with EASA and FAA approvals provided.

Through this new capability, Magnetic MRO Engines Department will be able to shorten its customer's downtime by providing a more efficient and in-house repair service supported by a global team of specialists. In essence, Magnetic MRO's expert and competent engineers will be on standby and ready wherever the customer's engine is located, which is something that most maintenance organizations cannot provide.

"This new addition of engine capability complements our current offering of engine change, BSI, components/accessories swap as well as boro-blending" says Filip Stanisic, Head of Magnetic MRO Engine Management Department. "It enables us to extend our on-wing and off-wing support to our global customer base either in our base maintenance facility in Tallinn or at a remote location where our customer's engine is located. In addition to engine trade and management and in the light of expanding current capabilities Magnetic MRO has successfully become a fully operational Engine Line Maintenance Centre."

It is the future intention of the Magnetic MRO Engine Department team to extend the capability even further to support LPT Major Module removal, LPT Stage 1 Blades replacement, LPT Stage 1 NGV replacement and HPT Blade replacement.

GVH Aerospace to fit-out A330MRTT medical equipment for Airbus

A irbus Defence & Space selected GVH Aerospace to design and supply medical equipment fit-out for the A330 Multi-Role Tanker Transport (MRTT) aircraft.

The medical equipment solution will install various medical and life support equipment onto the Airbus stretcher modules, which can be configured to transport intensive care or standard care patients. The stretcher modules and medical equipment solution are designed for rapid conversion of the A330 MRTT into the medical evacuation role.

The A330 MRTT is the military derivative of the Airbus A330-200 aircraft, designed as a dual-role air-to-air refueling and transport aircraft. The platform is currently being operated by the Royal Australian Air Force, the Royal Air Force, the United Arab Emirates Air Force and the Royal Saudi Air Force. The A330 MRTT has been ordered by the French Air Force, Republic of Singapore



Air Force, Korean Air Force and the European Multinational MRTT fleet, with more than 50 aircraft in service and on order.

"We are pleased to offer a flexible and adaptable medical equipment design solution, and work closely with Airbus to deliver a system that can be reconfigured as operational needs change", quotes GVH Aerospace's CEO, Gareth Dyer.

Dyer stated that GVH Aerospace's heritage and experience in supporting the Australian aero medical domain with solutions designed to work in a demanding and austere environment is key to being able to offer this capability. This project will be delivered by GVH's Australia-based design team who specialize in aero medical product development and aircraft fit-out.



Bombardier opens new hanger at London Biggin Hill Service Centre

Bombardier Business Aircraft announced that its service centre at London Biggin Hill Airport has doubled its capacity with the addition of a new hangar and more than 70 technicians, providing customers in the region with extended maintenance support. The new hangar will be operational by the end of 2017 and the facility will grow to a total of approximately 115 employees by mid-2018.

With the high demand for OEM services in Europe, the additional hangar will be dedicated to heavy maintenance events, including 96-month and 120-month inspections. Following the expansion, Bombardier's London Biggin Hill Airport facility will be able to service twice as many aircraft, including scheduled and unscheduled maintenance, modifications and avionics installations for Bombardier Learjet, Challenger and Global aircraft.

"Customer satisfaction is a top priority at Bombardier. The new hangar and added technicians will offer our customers peace of mind and an exceptional level of support for all their maintenance needs. Bombardier knows its aircraft best, which is why we are seeing a great demand for our maintenance services in this region," said Jean-Christophe Gallagher, Vice President and General Manager, Customer Experience, Bombardier Business Aircraft.

Since its inauguration earlier this year, Bombardier's London Biggin Hill Airport facility has supported over 40 maintenance events, including a Ka-band high-speed internet with Rockwell Collins Airborne Data Router (ADR) retrofit installation. This additional hangar will provide customers in the region with extended maintenance support, reinforcing Bombardier's commitment to Biggin Hill Airport.

"This expansion is also a testament to Bombardier's dedication to growing business aviation in the UK and to strengthening its long-term relationship with London Biggin Hill Airport. We are committed to growing our customer support network worldwide, and to ensuring we offer aftermarket products that add value throughout the lifecycle of our aircraft," added Gallagher.



TurbineAero Enters lands three year A320 APU MRO Agreement

TurbineAero entered into a three-year GTCP131-9A (A320 Family)
Auxiliary Power Unit (APU) Maintenance Repair Overhaul (MRO)
agreement with Jetstar Pacific Vietnam.

The agreement involves key elements of cost protections, minimum on-wing performance levels, and on-site engineering support. According to TurbineAero, their SMaRT-Workscoping maintenance approach will also provide Jetstar Pacific Vietnam with cost savings in addition to easier accessibility, as the MRO provider is based at the center of Southeast Asia and near Bangkok's International Airport.

"Jetstar Pacific Vietnam has enjoyed a close relationship with TurbineAero over the years, and we are delighted to expand on that relationship with this new GTCP131-9A Auxiliary Power Unit (APU) maintenance, repair and overhaul agreement. We find in TurbineAero a trusted partner that provides both qualitative, timely and cost-effective solutions to its customers as well as second-to-none service. The cooperation with TurbineAero would bring further support for Jetstar Pacific's fleet development as well as contribute to providing our passengers with quality service." said Nguyen Quoc Phuong, CEO of Jetstar Pacific Vietnam.



Jetstar Pacific Vietnam previously trialled APU's overhauled by TurbineAero-Asia in their Thailand based APU overhaul facility. "TurbineAero offers Free of Charge (FOC) trend monitoring services and detailed reliability improvement initiatives to Jetstar Pacific," said Peter Gille, Vice President/General Manager of TurbineAero's Asia business.

Vietnam Airlines chooses Pratt & Whitney engine for A321neo order

Pratt & Whitney, a division of United Technologies, and Vietnam Airlines announced the selection of the Pure Power Geared Turbofan (GTF) engine to power 20 A321neo Airbus aircraft. The deal, which is valued at \$1.5 billion at list prices, includes a 12-year Engine Wise Fleet Management Program.

"We are pleased to select the GTF engine for our fleet of A321neo aircraft," said Duong Trí Thành, president and CEO at Vietnam Airlines. "This engine will deliver superior economic and environmental performance to Vietnam Airlines."

"We are proud to celebrate this momentous occasion with Vietnam Airlines," said Rick Deurloo, senior vice president of sales, marketing and customer support at Pratt & Whitney. "We've been powering Vietnam Airlines since the early 1990s when the airline received its first PW4000-powered 767. We look forward to continuing our strong relationship and long history with Vietnam Airlines."

GTF engine has the ability to reduce fuel burn by 16 percent, regulated emissions by 50 percent and noise footprint by 75 percent, according to Pratt & Whitney.





American Airlines to Insource CFM56-5B MRO after GE Contract Expires

f A merican Airlines plans to bring its CFM56-5B engine maintenance in-house starting in October 2018. "Today, that engine overhaul

work is performed by our GE Engine partners," says David Seymour, the airlines' senior vice president-integrated operations.

American Airlines' base in Tulsa, Oklahoma will perform the maintenance, repair and overhaul work and expects to input 45 CFM56-5B engines per year after it sets up the capability. The airlines contract for the CFM56-5Bs MRO is set to expire next year so the airline bid it out to GE, other vendors and its in-house shop.

After the bidding process, American determined its internal "team who does the -7B work so well should perform the same work on the -5, especially given the high degree of commonality of the two engine variants," says Seymour.

It operates a total of 318 CFM56-5Bs that power 151 of its fleet of 392 Airbus A230-family aircraft. To accommodate the -5B, Americans plans to add 80 positions to the Tulsa engine shop, which already performs CFM56-7B overhauls—in 53 days.

Seymour says that "whenever there's steady, long-term consistent work that our skilled technicians can perform in-house and it makes competitive sense to do so, we will Insource that work." Seymour told its Tulsa Tech Ops employees on Nov. 29 that American "performs more maintenance work in-house on our own aircraft and engines than any other airline."



UK Charter Airline Will Install New MRO Software

ommsoft has acquired Titan Airways as a user of its OASES MRO software. Titan has selected the core, airworthiness, planning, materials, line maintenance control and production modules, which will be installed on local servers.

Titan is establishing its own CAMO team to replace an existing third-party service, and Commsoft will provide extensive support in implementing the system for the management of Titan's A318-112, three A320-200s, A321-211, Boeing 737-400F, 737-300QC, two 757-200s and 767-300ER.

It is anticipated that the airline will be expanding its fleet in the near future with the addition of a Boeing 737-400 in January 2018 and a further A320 or A321 later in the year.

Magnetic MRO Opens Paint Hangar

agnetic MRO opened its purpose-built paint hangar's doors for operation Nov. 2. The hangar is already booked for the next six months by both existing and new customers.

The 2,853 sq.-meter hangar in Tallinn, Estonia enables Magnetic to provide painting services for a range of narrow body aircraft types, including Boeing 737MAXs and the Airbus 320neos. With this new hangar, Magnetic MRO has increased its total dedicated painting area to 4,354 sq. meters.



IN AN EXCLUSIVE INTERVIEW WITH KARTIKEYA EDITOR OF AVIATION UPDATE DR. GURUPRASAD MOHAPATRA, CHAIRMAN, AAI, ABOUT ITS KEY INITIATIVES, CURRENT PRIORITIES AND FUTURE PLANS



Congratulations for crossing 100 Billion rupees turnover. When we can expect this to double?

AAI reached the milestone turnover of 100 Billion during the FY 2015-16 and continued with the trend of higher turnover during FY 2016-17 for Rs.125.42 billion. This increasing trend is expected to continue in the years to come. However, there are constraints which may have an impact on the Revenue growth of AAI, such as, Reduction in Revenue share of AAI from Airport Lease Revenue of DIAL due to reduction in their Tariff as per Supreme Court judgement on AERA order.

As Aeronautical Revenue is mainly driven by Aircraft/Passenger/Cargo movement, AAI is exploring the Non-aeronautical sources to augment its Revenue as at present the share of Non-Aeronautical Revenue to Total Revenue is only about 15% as against the Global standards of 40%.

What is your take on the progress so far made in UDAN scheme? In what way the scheme fits into the business model of AAI?

The progress is as per the expectations. The airlines and airport operators are both working to make RCS successful.27 proposals covering 128 RCS routes were awarded on 30th March 2017 during the 1st Round of Bidding and Honorable Prime minister of India flagged off the first flight on 27th April 2017 from Shimla. Flights have now commenced from 13 RCS airports; Bhatinda, Gwalior, Kadapa, Kandla, Ludhiana, Mysore, Nanded, Pondicherry, Porbandar, Shimla, Vidyanagar, Bikaner and Jaisalmer. Other RCS airports are expected to start operations from December -2017.27 served airports, 12 underserved airports and 31 unserved airports (total of 70 airports) are to be connected under phase-I.

In the second round of bidding, a total of 141 proposals have been received to connect 126 airports/heliports. Counter proposals have been invited against these proposals on 16th November 2017.

AAI being extended arm of Government, has been entrusted with the implementation of the RCS scheme. It can be a win-win situation for AAI as the RCS operations can transform the erstwhile non-operational/underserved airports of AAI into profit making entities. The middle class in India is expanding and the low price of tickets under RCS is an attraction to fly for big chunk of middle class population. Once the route develops over a period of time the route will come out of ambit of RCS and will definitely prove to be a source of revenue for AAI through collection of usual charges as at other airports.

The three years of concession will definitely have considerable effect on reviving the airport and make the operations commercially viable. Further AAI is collecting Route navigation charges from the operators on concessional terms and this will increase with increased number of RCS flights.

What is your opinion on the projects built and operated by AAI and those under PPP mode? Whether the core competencies of AAI has been refined to take up new challenges in light of competition from PPP model of developing airports?

The Government of India envisaging the growth of air traffic vis-à-vis with availability of resources, talent, governmental/bureaucratic interference. and a paucity of professional management recognized the need for reforms and decided to invite private investment into India's civil aviation infrastructure. The private sector, including foreign investors, were attracted to participate in the operation, management and development of Indian airports through various public-private partnership (PPP) models, with substantial state support in terms of financing, concessionary land allotments, tax and other incentives. It has been observed that PPP model of developing airports has been successful for busy airports where demand has matured and is growing still further. AAI is not behind in any respect when it comes to development of infrastructure or the quality delivered. The benchmarking results are there to show and

some of AAI airports figure in the top global airports. The skillset of the personnel in AAI is the biggest asset of AAI and the core competencies are further being enhanced through regular trainings and exposure.

AAI on its own completed modernization of 60 airports including 2 Metro airports. Second Phase of modernization has commenced at major airports like at Chennai, Srinagar, Pune, Dehradun, Lucknow, Mangalore, Jaipur, Goa, Agartala, Guwahati, Leh, Patna, Trichy, Vijayawada and Jabalpur. We have adopted modern cutting edge technology in passenger facilitation and Air Navigation Services enhancing the Terminal as well as airspace capacity at all the airports. We are confident that we can take up high value projects with equal conviction.

In view of the rate of growth, airport infrastructure is an area that needs immediate attention. The National Civil Aviation Policy aims at the development and modernization of airports and upgrading of quality of services. The Policy encourages the development of airports by state governments and the private sector (including via PPPs), with greater regulatory certainty. Civil aviation is a huge growing market and there will be requirement for investment and professional management. PPP/private participation will be required to meet the infrastructure requirements in time.

How do you see emergence of infrastructure development in aviation sector of India? Whether the focus v still lies in metro cities as the demands are increasing at a faster pace.

The air traffic in India has been growing on the fast track. During the year 2016-17, 264.97 million passengers were handled at Indian Airports, registering a phenomenal growth of 18.3% over the previous year. The domestic passenger traffic increased from 169.29 million in 2015-16 to 205.68 million in 2016-17 registering an impressive growth of 21.5%. The international passenger traffic increased from 54.66 million in 2015-16 to 59.29 million in 2016-17 and witnessed 8.5% growth over the previous year.

During 2016-17, the aircraft movement also witnessed growth of 14.1% over the previous year. International and domestic aircraft movements witnessed 6.8% and 16.1% growth respectively over the year 2015-16.

The freight traffic also registered 10.1% growth during the year 2016-17 over the year 2015-16. The international and domestic aircraft movements registered 11.9% and 7.3% growth respectively over the previous year.

For a holistic growth of aviation in India it is essential that infrastructure is developed in all corners of the country including Tier II and Tier III cities. UdeDeshKaAamNagrik (UDAN) scheme envisages air connectivity to unserved/ underserved airports, heliports etc. The air connectivity from small cities also requires creation of more capacity at major airports throughout the country. AAI has embarked upon infrastructure development plan with the outlay of Rs.20500 Cr in next 5 years which includes upgradation and expansion of existing airports, revival of nonoperational airports, upgradation of ANS Infrastructure and the Telecommunication infrastructure. Further, AAI will provide logistical and technical supports to the State Governments for bringing up Greenfield Airports and Operationalisation of their airports.

What are the future developments plans to modernize CNS/ATM systems in India? What global clues AAI has taken in modernizing the sector to handle increased air traffic in India?

AAI has put in pace a strategic plan in line with ICAO Global Air Navigation Plan [GANP] and Aviation system block upgrades (ASBU) to enhance safety, efficiency and airspace capacity through systemic improvements in communication, surveillance, navigation and Automation systems.

In the recent past, we have implemented various state-of-the-art technology, CNS-ATM systems and advance ATM procedures to enhance safety, efficiency and reduce congestion in airspace across various airports and the entire Indian airspace. The entire Indian Airspace has been brought under Radar/ADS-B surveillance. ADS-B sensors have been integrated to provide an integrated multi-Radar based situational awareness to the Controllers. Advanced ATM Automation system with safety alerts and decision making support tools have been implemented at various airports. To reduce delays on ground and in air AAI is also focusing on upgradation of Air navigation Services. Central Air Traffic Flow Management (CATFM) has been installed making India only the 7th country in the world to have the capability. GAGAN has been commissioned. Once mandated GAGAN will be used nationwide for enroute and terminal procedures. GAGAN will provide increased operational efficiency, reduced fuel burn and enhanced capacity.

For fog bound airports, CAT-III [B] ILS operation are available for suitably equipped aircrafts at IGIA [03 Nos], Lucknow and Jaipur Airports. AAI will be commissioning CAT-III [B] ILS at Kolkata and Amritsar before start of fog season 2018. The facility will be considered for other airports based on the requirement.

For improved ground movement, enhanced safety and to avoid runway incursions AAI has installed ASMGCS systems at several airports. Presently all our metros, Hyderabad and Bengaluru airports are having ASMGCS along with vehicle tracking facility. Recently the system has been extended to Jaipur, Lucknow and Amritsar. ASMGCS will be extended to Cochin and Bhubaneshwar airports also.

Futuristic telecom infrastructure(FTI) has been planned to provide networked connectivity across all the airports keeping in mind the future automated technologies required in the field of aviation to increase capacity and enhance the efficiency of the flight movement besides ensuring the safety and security of the aircraft.

Remote control towers. Mobile control towers, Space based ADS-B, enhanced collaborative decision making through use of AOCC, trajectory based operations, implementation of SWIM are some of the technologies that will be implemented in due course taking global clues. AAI has envisaged to invest approximately Rs. 2716 crores in the next five years i.e. 2016 to 2021 for induction of new technology, replacement of existing ANS facilities, GAGAN expansion plan, new ATC tower and Technical Blocks and ANS facilities at green field/ brown field and regional airports.

HR management in managing CNS/ ATM systems by AAI has time and again invited serious remarks from ICAO and FAA. What is the course correction AAI has implemented?

As you know, recruitment is a continuous process in any organization. AAI has taken

various steps to improve HR management of ATM system in the last three years. The recruitment of ATCOs has been stepped-up by AAI to cater to the shortage of ATCOs which had arisen because of the need to handle the rapid growth of air traffic and the requirement to meet the safety standards. There is of course some gap, however, AAI has firm recruitment plans to meet the challenge. Accordingly, necessary action has been taken to fill-up about 1000 vacancies in a phased manner form 2016 to 2020.

As part of initiatives to enhance safety and operational efficiency of ATC, AAI has implemented two stream ATC rating system at four major airports (Delhi, Mumbai, Kolkata & Chennai) w.e.f. October 2017. This will also help in enhancing the efficiency and productivity of ATCOs.

Additional ATM manpower is being posted at various airports, including RCS airports for providing ATC services and for enhancing the watch hours of few airports.

The training capacity of the 3 training centres at Allahabad, Gondia& Hyderabad has been enhanced to meet the new training needs. AAI has also undertaken the certification of ATS personnel as per the quidelines of ICAO.

ATC automation is a major initiative AAI undertook. What are bottlenecks AAI faced on the implementation? When we are going to see the next phase of improved ATC automation?

Advanced ATM Automation system with safety alerts and decision making support tools have been implemented at more than 40 airports. The automation system is the nerve centre of the Air Traffic Services and thus entire Air traffic control operations is dependent on the automation system. The bottlenecks are usual as experienced by any new system like customization, change management, training etc. Next phase will be in line with the life cycle of the existing systems.

RADARS has long outlived its service life in many airports? What are all replacement horizon you look into fitting new RADARs in their place?

AAI has planned to replace the out lived RADARs in phased manner. AAI has completed the phase —I replacement as well as up-gradation of Approach RADARs at Metro Airports (Delhi, Mumbai, Chennai

& Kolkata) by replacing the NGOSCO RADARS with Primary radar collocated with MSSR Mode-S Level-II in year 2014-15 at Chennai, Kolkata, Trivandrum and Ahmedabad Airports. Additional Approach RADAR (Primary radar collocated with MSSR Mode-S Level-II) has been provided at Delhi & Mumbaiairports for providing redundancy in the year 2013-14.

In Phase-II, AAI is in the final stage ofits replacement plan. RaytheonApproach RADARs at Delhi & Mumbai Airports have been replaced in the year 2016. NGOSCO RADARsat Mangalore & Guwahati Airportswith Primary radar collocated with MSSR Mode-S Level-II has been replaced in year 2017.En-route RADAR (MSSR) at Behrampur is being replaced with Mode S Level-IV MSSR. Tendering action in final stage.

In Phase-III, AAI is planning to replace En-route Raytheon RADAR (Primary route Radar co-located with MSSR) at Delhi & Mumbai Airports and NGSCO RADARs (MSSR) at Varanasi & Nagpur Airports, for which action has been initiated .

What are the future development plans to improve the aesthetics and public service in terminal buildings?

Development at the airports is a continuous process based on the life cycle, enhancements and more importantly the customer expectations. Most of the airports have been provided with New Terminal Buildings with large spans and flexibility in lay out planning so as to ensure smooth maneuverability for the passengers and good ambience to the Terminals. The facilities in these Terminal Buildings are state-of-the-art and are aimed to improve passenger safety and comfort. To improve aesthetics and provide a local flavor artwork from local/regional reputed artists is being planned for existing as well as new terminal buildings. Special emphasis is being given on cleanliness and maintenance of the terminal buildings.

For automation of the terminal & apron operations, AAI has established the Common Use IT infrastructure with Common Use Terminal Equipment (CUTE), Common Use Self-Service Kiosks (CUSS) and overall integration of all systems through establishment of Airport Operational Control Centers (AOCC) at airports. This will improve the processing and queuing times for the passengers. Ministry of Civil Aviation has initiated a Digi -Yatra project for uniform implementation at all

airports to reduce the processing time at the airports through faster check-in and security clearances digitally. The proof of concept is being tested and finally the system will be unrolled in a phased manner.

On the baggage front also, AAI is implementing the Baggage Re-conciliation System (BRS) for facilitating faster baggage handling and re-conciliation at all major airports of AAI. The baggage drop facility and self-baggage checking through self-service kiosks have also been introduced. Several measures have been adopted to improve efficiency and customer satisfaction .Some of the services put in place for passenger facilitation are complimentary Wi-Fi service for initial period of 30 minutes, baggage wrapping facility, food & beverage service clubbed with general retail, business lounges etc.

AAI also plans implement Inline baggage screening with self-service kiosks, provide PBB (passenger boarding bridges) at most of the airports, provide travelers with information on mobile/ gadgets, improve the ambience at the airports, improve signage's for ease of finding ways in and around the airport, augment parking facilities and provide value added services like paid porters and kids entertainment etc.

Our endeavor is to use IT in all areas of operation viz. Arrival, Departure, Cargo handling, etc. so as to make the operations fast and hassle free.

Whether AAI is planning to construct terminals for low cost carriers? No frills airport terminals in budding airports has not really taken off. What is the strategic push AAI plans to make it more attractive?

Airports are becoming landmarks in the respective cities. With the growth of economy, the air travelers have also rising aspirations and expectations thereby major airports are mostly planned with modern state of the art terminals.

Also there are no separate guidelines from Airports Economic Regulatory Authority for levy of charges on differential rates for low cost terminals at major airports, neither there is demand from Low Cost Carriers for creation of low cost facility at major airports. Making separate low cost terminals at major airports may not be a viable option, besides there is paucity of land for creation of separate low cost terminals at major airports in the existing setup.

However, No Frills Terminals are planned in the airports to be revived under UDAN Scheme till the traffic demand matures. Low cost Terminals can also be planned initially for Greenfield airports in small cities where the traffic may take some time to stabilize.

How do you view AAI's performance under you?

It will not be appropriate that I comment onAAI performance. It is up to you to judge our performance. I can share with you the facts and figures. Overall AAI showed revenue of Rs.12542 Cr. in the FY 2016-17 against Rs.10824 cr in the previous fiscal year. AAI's profit went up by 22.8 percent.

Though tremendous efforts been made in providing and upgrading existing air and ground infrastructure, the infrastructure gaps are always there. It is a challenge to be able to anticipate demand well in time, prepare & plan accordingly and create quality infrastructure. All efforts are being made to provide adequate runways, taxiways, sufficient airside capacity, Terminal Buildings with adequate facilities for the passengers and a very sound and reliable Air Navigation support system. We plan to augment infrastructure across Indian airports with CAPEX to the tune of Rs. 20,500 crores in the next few years. We have plans to operationalize about 44 number of unserved/underserved airports under RCS to provide connectivity to Tier-II, III cites and remote areas.

On the quality front AAI airports have been geared up to provide Quality Customer Services. Two of our airports Jaipur and Srinagar have been rated as first and second in the world rankings. Other airports are now at par with the global standards. We are striving towards achieving excellence in Customer Satisfaction by adopting world class technology and processes.

We are focusing to enhance Non-Aero Revenue to make AAI more profitable. AAI has initiated more focused and structured steps capturing revenue from passenger growth opportunities by adopting Revenue Share Mechanism and Licence Fee Escalation proportionate to passenger growth. Revised terms and conditions of Food & Beverage, Retail, Advertisement and other concessions have incorporated the best in the class measures matching with industry demand. AAI plans to shape up non-aero revenue

growth by 32% in year 2017-18 over the current year which is in line with NCAP 2016 objective.

AAI is also giving special focus on Cargo to augment the profitability and for this AAI has formed AAI Cargo Logistics & Allied Services Company Ltd (AAICLAS), a 100% owned subsidiary of AAI. The subsidiary will henceforth undertake all cargo and ground handling related activities at AAI managed airports. The Company will focus on Air Cargo handling and allied services, Warehousing and Contract logistics & Air Cargo Road feeder and Air Freight Stations.

What are the major changes you have brought about in AAI? What is the success rate by your own standards?

Again it is up to you to rate my success, but anyway I will list some of the changes. These activities are ongoing/planned and have shown good results.

- a) Introduction of project management consultants for speeding up the project work
- b) Empanelment of contractors for various categories of works
- Framing and implementation of standard operating practices for the operational processes for streamlining the procedures and getting a standard outcome.
- d) Artworks at the airports
- e) Integrated IT environment
- f) Sprucing up of the entire airports for pleasant passenger experience.
- g) Grading of air side areas.

What are the other areas you are focusing for overall improvement?

Roadmap is already in place to upgrade and expand several of our existing airports, revival of non-operational airports, upgradation of ANS Infrastructure and Telecommunication infrastructure. AAI has firmed up plans for augmenting infrastructure at key airports to augment the capacity and provide capacity ahead of demand and create enhanced passenger facilities. To cater for the future demand expected in next ten years AAI is geared up to construct New Terminal Buildings at Agartala, Guwahati, Leh and Gorakhpur;

Expansion of Existing Terminal Buildings-Phase 2 is planned at Chennai, Trichy, Srinagar, Pune, Patna, Lucknow, Bagdogra and Mangalore. Construction / Expansion of Terminal Buildings is in progress at Vadodara, Hubli, Belgaum, Kishangarh, Pakyong, Tezu, Port Blair, Jammu and Calicut;

Extension/ strengthening/ resurfacing of runways is in progress at Kolkata, Chennai, Surat, Trivandrum, Calicut, Ahmedabad, Jaipur, Dibrugarh, Vadodara.

Construction/ expansion of Apron is in progress at Vijaywada, Tirupati, Trivandrum, Raipur, Ranchi, Mangalore, Vishakhapatnam, Rajamundry.

New ATC Tower cum technical Block has been planned at Kolkata, Ahmedabad, Vadodara, Raipur, Varanasi, Jabalpur, Bhopal, Trivandrum, Trichy, Khajuraho, Puducherry, Guwahati, Bhubaneshwar, and Vishakhapatnam.

On ANS front CATFM (Central-Air Traffic flow management) will be extended for full operation across the country. The system will cover entire Indian airspace and integrate various subsystems with a decision support capability to safely, efficiently, and predictably manage demand when it exceeds capacity in various phases of flight thus regulating flow of traffic to minimize delays and congestion. The stakeholders i.e. Airlines will benefit enormously in form of improvement in overall turn-around time of aircraft resulting in considerable savings in fuel consumption and significant reduction in carbon emissions. Sustainable development is planned through Green initiatives like establishment of CATFM, Implementation of RNAV - ATS routes in enroute phase, Implementation of approach procedures with GNSS such as Baro- V, GAGAN based LPV procedures to provide better all-weather access to airports, thereby bringing down the instances of diversion that lead to avoidable fuel burn.

Use of solar green energy is being encouraged. Several solar power plants have been operationalized. 6.8 MW capacity roof top solar power plants and 19.8 MW ground mounted solar power plants are in progress. There are plans for replacement of all internal and external lightings at 15 airports with LED lights in this financial year. In addition airfield lighting systems being installed are planned based on LED to conserve energy.

Successful firing of Brahmos Air Launched Missile from Su30 MKI Aircraft

AF has successfully fired the BrahMos air version anti shipping missile from its frontline Su-30 MKI fighter aircraft off the Eastern Coast. The launch from the aircraft was smooth and the missile followed the desired trajectory before directly hitting the ship target. The missile was fired by the test crew comprising Wg Cdr Prashant Nair and Wg Cdr KP Kiran Kumar. The chase aircraft was flown by Sqn Ldr Angad Pratap and Gp Capt Badrish N Athreya.

The air launched BrahMos missile is a 2.5 ton supersonic air to surface cruise missile with ranges of more than 400 kms.





The IAF is the first Air Force in the world to have successfully fired an air launched 2.8 Mach surface attack missile of this category. The integration on the aircraft was very complex involving mechanical, electrical and software modifications on aircraft. The IAF was totally involved in the activity from its inception. The software development of the aircraft was undertaken by the IAF engineers while the HAL carried out mechanical and electrical modifications on aircraft. One of the major challenges overcome by scientists of RCI, DRDO in the missile development was optimization of Transfer Alignment of the inertial sensors of the missile.

The rich experience of the IAF flight test crew ensured that the integration was smooth. The dedicated and synergetic efforts

of the IAF, DRDO, BAPL and HAL have proven the capability of the nation to undertake such complex integrations on its own.

The firing could be successfully undertaken with dedicated support from Indian Navy by way of ensuring availability of the target and a large number of monitoring ships to ensure range safety clearance.

The BrahMos missile provides Indian Air Force a much desired capability to strike from large stand-off ranges on any target be in sea or land with pinpoint accuracy by day or night and in all weather conditions. The capability of the missile coupled with the superlative performance of the Su-30 aircraft gives the IAF a strategic reach and allows it to dominate the ocean and the battle fields.

Russian "eye-inthe-sky" A-100 to be tested in spring 2018

The trials of Russian A-100 "eye-in-the-sky" in-flight equipment are scheduled for spring 2018. The testing will be held in several stages, Izvestia informs. The aircraft's aerodynamics will be tested in December 2017, its radar and electronic warfare system – in March 2018.

The Beriev A-100 is an airborne early warning and control aircraft developed by Russia. The aircraft was created on the basis of modernized heavy military plane Ilyushin

Il-76 MD-90a. The plane is an upgrade of the A-50 aircraft. The older A-50 planes have been in use in the Russian Air Force since mid-1980s. According to Russian Defense Minister Sergei Shoigu, A-100 Premier should replace the previous generation of long-range radar detection aircraft.

One of the most distinguished features of the A-100 Premier is the Vega Premier active-phase array radar. The new Vega Premier AESA radar in the dome will have electronic steering in elevation. The array will rotate once every 5 seconds, thus improving the radar's ability to track fastmoving targets. According to experts, the plane can conduct reconnaissance missions and protect itself from air attack. Its onboard computer system is more powerful than the system in the preceding A-50 aircraft.

The aircraft is designed to target

fighters and bombers. A-100 Premier will be able to control the air and sea space within a radius of several hundred miles. It is equipped with a multi-position radar with two phased array antennas, as well as with electronic intelligence and electronic warfare complexes.

The aircraft will transmit information about the targets to the command posts of anti-missile and anti-aircraft defense, ensuring the guidance of anti-aircraft missiles. Presumably, the complex will be able to operate at a distance of up to 372 miles for aerial purposes, and for surface targets, this distance will be 248 miles and will provide information to ground troops and aviation.

Deliveries of the "flying radar" A-100 to the military troops are scheduled to begin in 2020

Finland seeks 64 jets to replace Hornets

Finland's Ministry of Defence plans to send out invitations to tender for the purchase of 64 new fighter jets, according to Yle. The new jets will replace the current stock of 64 F/A-18 Hornet jets, which have served the Finnish military since 1992.

The defence report, which was approved by the Parliament in February, says that the readiness of the current fleet must be fully maintained after the procurement.

"We have interpreted that to mean 64 fighter jets. Because the new jets are not faster and can't stay up in the air any longer than the current ones, we will require the same number of jets to maintain the performance of our air defence", says Lauri Puranen from the Ministry.

"That is the minimum number we need to defend a country of this size."

Parliament has decided that it will spend between 7 and 10 billion euros the new jets, which will make the acquisition the most purchase by Finland ever.

The ministry said it will send out invitations to tender in early 2018 to Boeing and Lockheed Martin from the US, Saab from Sweden, Dessault Aviation in France and the British-European BAE Systems.

The new government taking up office in 2019 will make a decision about purchasing fighter jets to replace the current stock of Hornet jets at the end of 2021. The current fleet will be retired by 2030.



Boeing announced booking Air Force One planes

B oeing announced formally booking an order for two 747s with the US Air Force. The jumbo jets are to be turned into Air Force One – the US President's aircraft, Reuter's reports.

Boeing sells unrefurbished 747s for about \$390 million apiece, but the planes then require significant modification in order to be turned to Air Force One. Although the time constraints on when the planes are going to be delivered or ready for use are unknown, there have been reports back in September 2017 that the aircraft is required to be ready for use in 2024, as Reuters also pointed out.

On August 1, 2017 the US Air Force announced that it is negotiating the purchase of two Boeing 747s that were abandoned by a bankrupt Russian airline with the goal of converting them into the next Air Force One. The planes had initially been ordered in 2013 by Russian airline Transaero, but the firm fell into bankruptcy in 2015 and never took delivery.

Converting such jumbo jets to luxury command centers for the president by 2022 would have cost at least \$3.2 billion, however, the option was seen as the "cheaper deal" which could have saved the Air Force "millions of dollars". It was initiated after President Donald Trump described the estimated cost of building new, specially designed Air Force One planes as "ridiculous."



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Norway receives first batch of F-35s

n November 3rd, three Norwegian F-35 aircraft flew from Fort Worth, Texas and landed at Ørland Air Base, Norway. "Receiving the first three aircraft is a major milestone for Norway. On November 10th, Norway will celebrate First Aircraft Arrival of the first three F-35s on Norwegian soil. Achieving this milestone is a major step towards increased operational capability for the future," says Major General Morten Klever, Program Director for the F-35 program in Norway's Ministry of Defence.

"This is an historic event. The arrival of the first F-35 in Norway at this time shows that we have reached the timeline set for the acquisition. The program delivers on all key criteria: time, cost and performance. Today we are both proud and happy. The Royal



Norwegian Air Force is looking forward to starting their training with the F-35," says Major General Klever.

The three aircraft, the first to be delivered to Norway, took off from Fort Worth, Texas at 06.35 AM Norwegian time November 3rd and landed at 03.57 PM the same day at Ørland Air Base. From 2018, Norway will receive six aircraft annually up until, and including, 2024.

Lockheed Martin signs \$158.5M deal for Germany's P-3C Orion

ockheed Martin received a \$158.5 million contract for the second phase of the German Navy P-3C Mission System Refresh program. The program will upgrade the mission system processing suites on the fleet of eight P-3C Orion maritime patrol aircraft to support operations through 2035. The Mission System Refresh is part of an overall fleet upgrade that includes structural mid-life upgrades as well as an upgrade to the Instrument Flight Rules (IFR) cockpit capability.

The Germany P-3C Orion Mission System Refresh Program will include the design, development, manufacture, integration, installation and test of the Lockheed Martin Airborne Tactical Mission System. The majority of the hardware and software design, manufacture and upgrades will be performed at Lockheed Martin sites in Owego, New York, Manassas, Virginia and Marietta, Georgia.

"The P-3 Orion has been the world standard in maritime surveillance for over 50 years. Lockheed Martin is dedicated to providing solutions and critical needs that our U.S. Navy and international customers rely on to carry out these critical missions," said Mike McGuire, Lockheed Martin Rotary and

Mission Systems Germany P-3 program manager. "The Mission System Refresh provides critical surveillance capabilities, reduces hardware footprint and supports continued future system sustainment."

The Airborne Tactical Mission System is an Open Architecture JAVA-based system that provides state-of-the-art software programs as well as core mission system processing, display and control components. By leveraging Commercial-Off-The-Shelf (COTS) components, future obsolescence costs are reduced thereby supporting the long-term system sustainability for the customer. In addition to the Airborne Tactical Mission System, the Mission System Refresh will include a new acoustic processing system called the Airborne Rack-Mounted Commercial Portable Processor (AR-C2P) that will provide long-term sustainability in the P-3 aircraft.

The Germany P-3 Orion Mission System Refresh Program began in 2016 when the U.S. Navy awarded Lockheed Martin an initial Foreign Military Sales (FMS) contract for \$54.9 million for design and development work through Preliminary Design. This current contract award of \$158.5 million takes the program from Preliminary Design Review through program completion in 2022. The eight aircraft operated by the German Navy were procured in early 2006 from the Royal Netherlands Navy. The P-3 boasts a number of international customers; a number of whom envision operating their aircraft though 2040.



Embraer KC-390 to begin US flight trails

The new Embraer KC-390 multi-mission military transport and tanker jet will start a series of flight trials in the United States as part of its flight test campaign for certification. The aircraft arrived at Embraer's facility in Jacksonville, Florida on November 21, 2017 from Brazil.

For the next two to three weeks, the aircraft will be performing tests in the avionics systems, measurement of external noise and operations with cross wind.

"The KC-390 sets new standards in the market and the flight test campaign is progressing extremely well matching the aircraft design goals," said Jackson Schneider, president and CEO of Embraer Defense & Security. "We are very satisfied with the maturity that this product has already reached and fully confident that its certification will be achieved as scheduled."



The KC-390 is capable of carrying out various missions, such as transporting cargo, troops or dropping paratroopers, and aerial refueling, search and rescue, medical evacuation and aerial firefighting, in addition to supporting humanitarian missions. The aircraft can transport up to 26 metric tons of cargo at a maximum speed of 470 knots (870 km/h), as well as operate in hostile environments, including from unprepared or

damaged runways.

Since the start of the flight test campaign, in October 2015, both KC-390 prototypes have demonstrated high rates of availability, accumulating more than 1,450 flight hours. The company expects to achieve the Initial Operational Capability by the end of 2017 and first delivery is scheduled in 2018.

First flight of Tu-160M2 slated for February

The first test flight of the modernized strategic Tu-160M2 bomber (codename White Swan) is scheduled for February 2018. This was announced by Russia's deputy prime minister Dmitry Rogozin during a meeting with President Vladimir Putin.

"We plan that as early as 2019 we will have functioning aircraft. 2023 will mark the start of deliveries, and the first flight of Tu-160M2, which today left the shop, will be held next February", Rogozin reported.

Earlier, it was the Ministry of Defense that insisted on the renewal of this version of the Tu-160 on a new base.

"Just on the days when the Kazan Aviation Production Association celebrates its 90th anniversary in Kazan, the Tu-160M2



aircraft was rolled out from the workshop. As a matter of fact, this means that the plant has fulfilled the most complicated task of restoring production, including electron-beam welding and titanium work," the deputy prime minister added.

The new Tu-160M2 will become the 17th Tu-160 type aircraft at the disposal of Russia's long-range aviation forces.



EVA Air Cargo takes delivery of first 777 freighter

L VA Air Cargo took delivery of its first 777F and plans to put the new freighter in service on routes between Asia and North America later this month. The Taiwanese carrier ordered five 777 freighters from Boeing in 2015 and will take delivery of the remaining four by September 2019. As it adds the new freighters, EVA Air Cargo will retire its five remaining 747-400Fs, taking them all out of service by the end of 2019.

EVA Air currently operates a fleet of 79 aircraft, including the new freighter. The 777 freighter is the world's largest twin-engine air cargo carrier, filling a gap in the market left by aging 747-400 and MD-11 freighters. The aircraft has a range of 5,000 nautical miles, fully loaded, with a maximum capacity of 102 tonnes. With one technical stop in Anchorage, Alaska, EVA can fly airfreight on a 777 from Taiwan to any destination in North America.

Turkish Cargo adds two more QEPaccredited stations to roster

Turkish Cargo added two more QEP-accredited Envirotainer stations as part of the carrier's strategy to attract more high-value pharmaceutical traffic, which chief cargo officer Turhan Ozen said, "addresses decreasing yields in the industry." The two stations, Brussels and Atlanta, extend Turkish Cargo's pharmaceutical transportation service in important pharma markets.

The Istanbul-based cargo carrier seems to be perusing an economy-of-scale strategy with its pharma stations, hoping to attract large pharmaceutical companies with its growing number of eight QEP-accredited stations (Bombay, Frankfurt, Hyderabad, Seoul, Istanbul, Tel Aviv, Brussels and Atlanta). The carriers said that the latest additions will "increase the current business potential, as well as service to its customer."

Turkish Cargo has earned a reputation over the last decade as one of the fastest growing cargo ops in the business, outpacing the competition, and rising six places to No. 22 in this year's "Freight 50" list of top cargo carriers. QEP certification is Envirotainer's program to ensure that freight forwarders and airline stations meet industry standards for managing its container shipments.



Swissport's Frankfurt outpost earns CEIV Pharma certification

Swissport Cargo Services Frankfurt is the latest outpost to earn IATA's CEIV-Pharma certification, following "investments into infrastructure, equipment and training." The global ground handler – which also recently acquired Aerocare, the largest ground handler in Australia and New Zealand – said that the certification followed development of a dedicated product line for the handling of lifescience and healthcare shipments.

Ground handling has remained one of the least-controlled links in pharmaceutical supply chains, with shippers often complaining that their pallets were languishing on runways, subjecting the sensitive contents to temperature excursions. But with Swissport Cargo's Frankfurt facility earning CEIV-Pharma certification, those weak links are being eliminated.

"Regarding pharma shipments, we fully realize that there are always humans involved, who need a constant flow of safely delivered medical products," said Philip Roodenburg, station manager at Swissport Cargo Services Frankfurt. "Hence, it is of



utmost importance to have a solid process, training and a state-of-the-art facility in place."

Roodenburg said that earning the certification was challenging, but noted that, "our business is continuously changing and it's our duty to keep up with these changes." He added that, "Next to further developing our pharma-handling capabilities, we are also constantly improving our processes and seeking for innovations that can make the difference in future cargo handling."

Swissport continues to grow its global footprint, announcing this week that it was expanding into the Australasian market with the acquisition of Aerocare, with 36 airports and more than 160,000 flights under its auspices.

FedEx is the Launch Customer for ATR's new production freighter

ATR 72-600Fs, with options for twenty more. This will be ATR's first production freighter. Until now, any carrier or lessor that wanted a turboprop freighter had to first acquire a used passenger unit, and then have it converted to freighter configuration. Most such conversions were to bulk-load configuration – that is, modification of the interior of the aircraft to carry cargo, but no installation of a large cargo door.

According to ATR, the new freighter will have a windowless fuselage (i.e. no plugs), a forward large cargo door, and a rear upper-hinged cargo door. Changes on the inside include a class E main cabin with reinforced floor panels. The freighter will carry both bulk cargo and palletized/containerized cargo. ATR says the main-deck volume will be 74.6 cubic meters, with the ability to accommodate up to seven LD3 containers, or five 88" x 108", or nine 88" x 62" pallets. ATR did not offer data on the new freighter's range or maximum payload, but the passenger ATR 72-600 has a range with max payload of 1,528 km



(825 nm), and the currently-available converted 72Fs offer a payload of about 8.5 tonnes.

FedEx does not currently operate turboprop freighters itself, but it has twenty-one ATR 72Fs and twenty-six of the smaller ATR 42Fs in its fleet, and leases them to other carriers who operate them in feeder service for FedEx.

MIA debuts webbased cargo flight tracker

Soon shippers, freight forwarders and anyone else with skin in the air cargo game will be able to view real-time flight information for airfreight moving through Miami International Airport (MIA), as the Miami-Dave Aviation Department launches its MIA Cargo Flight Tracker.

The web-based tracker is the first of its kind from an airport based in the United States, and will be unveiled recently at the Air Cargo Americas and Sea Cargo Americas 2017 exhibition in Miami.

MIA estimates that inbound and outbound freight at the airport has an annual commercial value of US\$57.3 billion, making up 92 percent of Florida's total air-trade market and 40 percent of the overall air- and seatrade value for the state.

The new cargo flight tracker is expected to save the local cargo industry time and fuel costs when coordinating shipments at the airport.



FedEx to be launch customer for new Cessna turboprop

 ${\bf F}$ edEx Express is to be the launch customer for a new Cessna twin-engine turboprop aircraft. The express giant has signed a deal with Cessna parent company, Textron Aviation, for 50 SkyCourier 408 aircraft, with options for a further 50.

The new aircraft, described as a development of the single-engined Cessna Caravan, is scheduled to go into service in 2020. Textron said it had developed the aircraft in response to the ageing twin-utility turboprop fleet, which have an average age of 30 years.

Cessna is offering the SkyCourier 408 in cargo and passenger variants. The former has a large cargo door and a flat floor cabin that can handle up to three LD3 shipping containers with 6,000lbs maximum payload. Range is 900 miles, maximum cruise speed is 200 knots and single-point pressure refuelling will enable faster turnarounds.

Textron Aviation president and chief executive, Scott Ernest, said: "The aircraft will fulfil a gap in this market segment with its superior performance and low operating costs in combination with the cabin flexibility, payload capability and efficiency only a clean-sheet design can offer."

His counterpart at FedEx, David Cunningham, added: "This new, advanced aircraft will play a key role in our feeder aircraft modernization strategy. The Cessna SkyCourier 408 offers a number of significant features that will enhance our long-term strategy."



ANA first Japan-based carrier to earn CEIV-Pharma cert

Interest in developing a more reliable cool-chain in Asia continued this month, as All Nippon Airways (ANA) became the first Japan-based airline to earn IATA's Center of Excellence for Independent Validators for Pharmaceuticals (CEIV-Pharma) certification.

The accreditation was awarded to ANA's largest cargo operation, located at Narita International Airport, near Tokyo. In order to obtain this certification, ANA had to clear a check list comprised of approximately 250 audit items.

To earn the cert, ANA said it implemented numerous supply chain enhancements, such as a new organizational structure, training programs, quality management and creation of a new handling manual. Last autumn, ANA said it developed the product "PRIO IB Fixed Temp," a service for temperature-controlled product transportation, and "will continue to strengthen the quality of pharmaceutical handling to meet customer's needs."

The CEIV Pharma Certification seeks to provide a high quality handling process, protecting the product quality during the transportation from environmental factors such as temperature excursions. According to IATA, the CEIV certification encompasses, and in some cases exceeds, existing pharmaceutical standards and guidelines such as the European Union's Good Distribution Practice (GDP) for Pharmaceutical Products.

SIA Cargo's reintegration pays off as cargo revenues surge in first half

S IA Cargo's reintegration into parent company Singapore Airlines seems to have reversed the steep losses at the Singaporean cargo carrier. Just-posted half-year operating profits of US\$23 million represent a \$56.5 million, year-over-year, increase. Total cargo revenues for the first half of FY 2017-18 were also up \$90 million on higher freight carriage (up by 6.1 percent) and yield (up by 6.7 percent). The carrier's cargo load factor rose by 3.2 percentage points to 64.8 percent over the same time period.

These numbers are a sharp contrast to fiscal year 2016-17 cargo revenues, which declined \$46 million, y-o-y, on the back of cargo yield erosion, notwithstanding higher freight carriage. It's worth noting that, industry-wide, yields have progressively increased since March 2017, with last month's gains of 12.1 percent virtually ensuring that any competent cargo department will be posting strong results in the months ahead.

SIA Cargo says that it will, "continue to pursue charter opportunities and deploy capacity to match demand." Over the second quarter, SIA Cargo reported an operating profit of \$20 million. Revenue grew \$47 million as freight carriage grew 5.4 percent, further lifted by a 9.1 percent improvement in cargo yield that the carrier accredited to "improved trade conditions." SIA Cargo operated a fleet of seven 747-400 freighters as of Sept. 30, and its freighter network covered 19 cities in 13 countries, including Singapore.



Qatar Airways investments equal nearly 10 percent of Cathay Pacific ownership

E xpanding its reach into the Asia-Pacific region, Qatar Airways agreed to purchase shares amounting to about 9.6 percent ownership in Hong Kong-based Cathay Pacific Airways. Cathay Pacific, like Qatar Airways, belongs to the oneworld global airline alliance. According to Reuters, Qatar Airways bought roughly 378 million of Cathay Pacific's shares from Hong Kong's Kingboard Chemical Holdings for about US\$661 million.

Qatar Airways' investment strategy since 2015 has focused on increasing stakes in airlines based outside the Middle East. The investment in Cathay Pacific comes about three months after Qatar Airways said it had ended plans to acquire 10 percent of American Airlines, after that plan was met with resistance in the United States. Several U.S.-based carriers, including American Airlines, have publicly spoken out against what American Airlines CEO Doug Parker called the "illegal subsidies" Gulf carriers receive from their governments.

In response to the charges by U.S. carriers, Qatar Airways CEO Akbar Al Baker said in September that U.S. carriers lobbying the government to limit Gulf carrier access to "shut up and mind their own business."

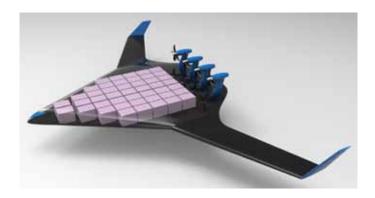
In December 2016, Qatar Airways acquired 10 percent of Chile-based LATAM Airlines. Qatar Airways also owns 20 percent of IAG, the holding company of British Airways and Iberia, and 49 percent of Italian carrier Meridiana.

Natilus cargo drone closes second round of seed funding

argo drone startup Natilus announced that it has closed a second round of seed funding with investment from Starburst Ventures, Seraph Group, Gelt VC, Outpost Capital and Draper Associates. The funds will go towards "aggressively scaling," in anticipation of the startup's first Federal Aviation Administration-approved flight for its 30-foot prototype. The test flight is scheduled for late 2017, and a commercial market launch is set for 2020.

Pitching the startup's propeller-driven drones as a cheaper alternative to conventional airfreight, and a faster alternative to maritime transport, Aleksey Matyushev, CEO of Natilus, called the second round of investment "an important milestone." Matyushev added that the latest round of financing would allow Natilus to bring on additional staff to finish design of the company's 12,000-pound e-commerce drone, while at the same time growing their flight-testing operation for their 2,200-pound, 30-foot prototype.

Along with the news, Natilus released additional images of the prototype of a 2-tonne payload freighter with a blended-wing body (BWB) configuration that Matyushev said was very close to the final product.



The latest version also shows an option for terrestrial landing gear. Previous images released by the startup show water landing capabilities, as well, which Matyushev said would allow the drone to bypass costly airport infrastructure.

Natilus hopes to have a full-scale, 60-meter, 90-tonne cargo payload drone ready to fly by 2020. Ultimately, the startup plans to manufacture hundreds of the cargo drones. Their target customers are integrator companies, such as UPS and FedEx, as well as medium-sized freight forwarders with customers like Whole Foods and Costco.

Lufthansa Cargo, Fraport Ground Services renew contract through 2025

ufthansa Cargo AG and Fraport AG Ground Services have signed a contract to extend their ground-handling partnership at Frankfurt Airport (FRA) for eight more years. The agreement, extending from January 2018 to December 2025, covers aircraft ground handling – particularly the loading and unloading of Lufthansa Cargo's freighter aircraft.

Transportation of cargo to and from the aircraft on the airport grounds is also part of the agreement. Representing the highest cargo volumes of all airlines at FRA, Lufthansa Cargo's business is a major contributor to Fraport AG Ground Services bottom line.

"The agreement underlines the close and longstanding relationship between Fraport and our partner and customer, Lufthansa Cargo, here at Frankfurt Airport," said Michael Müller, member of the Executive Board and executive director of labor relations for Fraport AG. The Lufthansa Cargo fleet currently consists of 777 freighters and MD-11 freighters, but the MD-11 fleet will begin a process of replacement with 777Fs starting next year.



Former IATA cargo boss Vertannes joins airfreight IT pioneer e-Cargoware

TIACA Hall-of-Famer and airfreight veteran Des Vertannes has signed on as non-executive chairman for airfreight IT firm e-Cargoware, establishing IATA's former head of cargo in the boardroom of a company whose stated mission is to, "disrupt the cargo Industry and replace legacy solutions."

Vertannes' new role allows him to continue promoting IATA's crusade against legacy paper-based systems. Vertannes said he supports e-Cargoware's vision of "transforming the air cargo community by eliminating inefficiency through paperless freight."

Commenting on his new role, Vertannes said that "e-Cargoware has built a niche in the air freight industry as a provider of simple, easy-to-use and cost-effective cargo management platform on the Cloud."

AVIATION UPDATE

"DFID, AASSC held aerospace and aviation skill round table on skill development to meet the growing demand"

Development (DFID), a UK government department, and the Aerospace and Aviation Sector Skill Council (AASSC) organised a 'First of its kind' roundtable conference in Bengaluru on 29 November 2017. The roundtable was on 'Skill development to meet the growing demand of Aerospace and Aviation Sector'. Theevent was attended by senior officials from the Ministry of Civil Aviation (MoCA), the Ministry of Skill Development and Entrepreneurship (MSDE), National Skill Development Corporation (NSDC), and eminent persons from the aerospace industry, assessment agencies and training partners.

DFID India's 'Skills for Jobs' project is providing technical assistance to help scale up and improve the quality of vocational training and skill development in India. The project works with central and state institutions as well as with the industry led sector skills councils. The roundtable formed part of the Skills for Jobs project.

Dominic McAllister, UK Deputy High Commissioner in Bengaluru, talked about the significance of skill development as an important area of collaboration between India and the UK. The UK hasallocated additional resources for collaboration in this area in line with their Prime Minister's announcement during her visit to India in November 2016. Aerospace and Aviation is a fast developing sector in India and one where UK can bring in long-standing knowledge and expertise. He wished success for the Roundtable discussions hoping that it will lead to meaningful and effective skill development work in the sector.

Mr Suvarna Raju, Chairman, HAL during his keynote address acknowledged the long relationship that existed between India and UK in the aviation sector andinformed that the aim of AASSC was to train at least 4 lakh trainees till 2020 encompassing Level 1 to Level 4 work force in the sector. Further, Ms





Vandana Aggarwal, Senior Economic Advisor, Ministry of Civil Aviation during her keynote address while highlighting the various intiatives taken by GoI, mentioned that it was important to plug the skill gaps that exist in the sector and also draw synergy between the aerospace and aviation workforce.

Ms. Anu Gupta, Head Skills and Inclusion, DFID, said that the UK Government is fully committed towards skill development in India. As a next step, DFID and AASSC had identified pilot interventions to be implemented with support from the Science, Engineering and Manufacturing Technology

Alliance (SEMTA) UK over the next 6 months todefine potential strategic areas of collaboration with prospective UK skill training partners in the sector. Mr Dean Fox, SEMTA, UK elaborated the key areas of the proposed interventions whilst reiterating their commitment and emphasising the importance of making a more conducive environment for skilling in the aerospace and aviation sector.

D Peter Immanuel, CEO, AASSC, welcomed DFID's offer to implement the pilot, hoping that it will lead to focussed collaboration between India and the UK in the areas of Skill Development for the Aerospace and Aviation sector.

The primary focus of the conference was to apprise key stakeholders of the pilot intervention planned by DFID and AASSC, which is to be implemented in partnership with the Science, Engineering and Manufacturing Technologies Alliance (SEMTA), UK and to garner their views on the opportunities, challenges, and solutions for the industry. The participants appreciated the initiative taken by DFID and AASSC and expressed the necessity of such programs as a right step towards skill development.

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Interview City	Position	Date	Time	Venue	Aircraft Type
Gurgaon(ISC)	Cabin Crew	2-Dec-17	10AM - 01PM	InterGlobe Aviation Limited ("IndiGö),Level 2, Tower C, Global Business Park, MG Road	A320
Kolkata	Cabin Crew	4-Dec-17	09AM - 02PM	Hotel: Novotel, CF — 11, Action Area 1C, New Town, Rajarhat	A320
Port Blair	Cabin Crew	6-Dec-17	11AM - 02PM	Hotel: Shompen, Near Bengali Club	ATR
Dehradun	Cabin Crew	7-Dec-17	1:30PM - 03.30PM	Hotel Lemon Tree Hotel, Pacific Mall, Jakhan, Rajpur Road	A320
Hyderabad	Cabin Crew	8-Dec-17	10AM - 01PM	Hotel: Radisson, HITEC City, Gachibowli	ATR
Guwahati	Cabin Crew	10-Dec-17	11AM - 03PM	Hotel-Kiranshree portico , Paltan Bazar, G.S Road	A320
Chennai	Cabin Crew	12-Dec-17	12PM - 04PM	Hotel: Park Plaza , OMR 142, Rajiv Gandhi Salai, Thoraipakkam	ATR
Lucknow	Cabin Crew	14-Dec-17	12PM - 03PM	Hotel : Vivanta by Taj, Gomti Nagar, Vipin Khand	A320
Shillong	Cabin Crew	14-Dec-17	08AM — 11AM	Hotel : Polo Towers, Polo Grounds	A320
Mumbai	Cabin Crew	15-Dec-17	09AM - 02PM	Hotel: Hyatt Regency, Sahar Airport Road, Andheri East	A320
Siliguri	Cabin Crew	16-Dec-17	01PM - 04PM	Hotel-Royal Sarovar Portico, 3rd Mile Sevoke Road	A320
Gurgaon(ISC)	Cabin Crew	16-Dec-17	10AM - 01PM	InterGlobe Aviation Limited ("IndiGö),Level 2, Tower C, Global Business Park, MG Road	A320
Gangtok	Cabin Crew	17-Dec-17	02PM - 05PM	Hotel: The Royal Plaza, Upper Syari, Deorali	A320
Bengaluru	Cabin Crew	18-Dec-17	10AM - 02PM	Hotel: Iris,The business hotel and Spa,70, Brigade Road	ATR
Chandigarh	Cabin Crew	19-Dec-17	09AM - 12PM	Hotel: Aroma Complex, Himalaya Marg, Sector 22–C	A320
Kolkata	Cabin Crew	19-Dec-17	09AM - 02PM	Hotel: Novotel, CF — 11, Action Area 1C, New Town, Rajarhat	A320
Imphal	Cabin Crew	22-Dec-17	12PM - 05PM	Hotel: Classic , North AOC Petrol Pump	A320
Mumbai	Cabin Crew	26-Dec-17	09AM - 02PM	Hotel: Hyatt Regency, Sahar Airport Road, Andheri East	A320
Jaipur	Cabin Crew	28-Dec-17	12PM - 03PM	Hotel :Royal Orchid Tonk Road, Durgapura	A320
Ahmedabad	Cabin Crew	28-Dec-17	11AM - 04PM	Hotel: Novotel, Iskon Cross Road, S.G. Highway	A320
Delhi	Cabin Crew	29-Dec-17	10AM - 03PM	Essex Farms Pvt. Ltd 4, Aurobindo Marg	A320
Kolkata	Cabin Crew	30-Dec-17	09AM - 02PM	Hotel: Hyatt Regency, JA-1, Sector III, Salt Lake City	A320



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.

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Eligibility criteria to attend the interview

- Age 18 and 27 years.
- Edu. Qualification Appeared for or HSC Pass (10 plus 2).
- Marital status Unmarried.
- Height Male 170 cms (min) / Female 157 cms (min).
- Weight In proportion to height.
- Language skills Fluency in English and Hindi.
- Physical features Pleasing personality and good eyesight.
- Interactive skills Excellent communication and good interpersonal skills.

Must posses a valid Indian passport and must carry resume with 1 passport size and 1 full length photo.

Dress code: Male Candidates: Western formals with a tie.

Female candidates - Formal blouse or shirt with a knee length skirt.



City	Interview Date	Time (Hrs)	Venue
Mumbai	Dec 2, 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.
Goa	Dec 4, 2017	0900 hrs to 1300 hrs	Institute of Advanced Management, Indismart Woodbourne Resort, Gonvoloy, Nuvem, Salcete, Goa.
Pune	Dec 4, 2017	1000 hrs to 1400 hrs	Novotel, Pune Nagar Road, Weikfield IT Infopark, Survey No. 30/3, Ramwadi, Viman Nagar, Pune.
Chandigarh	Dec 5, 2017	0900 hrs to 1300 hrs	The Golden Plaza Hotel, Paras Downtown Square Zirakpur, Chandigarh.
Delhi	Dec 6, 2017	1000 hrs to 1400 hrs	Constitution Club of India, Rafi Marg, New Delhi.
Kolkata	Dec 7, 2017	1000 hrs to 1400 hrs	The Circle Club, Crossing of VIP Road, Rajarhat, New Town Express Way, Opposite Charnock Hospital, Kolkata Airport, Kolkata.
Vadodara	Dec 8, 2017	1100 hrs to 1500 hrs	Hotel Suba Elite, Fatehgunj Road, Vadodara.
Bengaluru	Dec 9, 2017	1000 hrs to 1400 hrs	RG Royal Hotel - No. 19/1, Old 77, Near ISKCON Temple, Behind Ravindu Toyoto, Mahalakshmi Layout, Bengaluru.
Kochi	Dec 11, 2017	0900 hrs to 1200 hrs	Flora Airport Hotel, Opposite International Terminal Kochi Airport, Nayathodu P. O. Kochi.
Mumbai	Dec 16, 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	Dec 19, 2017	1000 hrs to 1400 hrs	Constitution Club of India, Rafi Marg, New Delhi.

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For more information, visit jetairways.com/careers or log on to facebook.com/jetairways. Source: Jetairways.com

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Language: Fluency in spoken English & Hindi

Walk in with your resumé and full length photographs.

CITY	DATE	TIME (HRS)	VENUE FOR INTERVIEW
Mumbai	1-Dec-17	10:00 - 14:00	Holiday Inn, Sakinaka Junction, Andheri Kurla Road,
			Andheri East, Mumbai - 400072.
Delhi	4-Dec-17	10:00 - 14:00	Essex Farms, 4, Aurobindo Marg, Near IIT Flyover, New Delhi.
Hyderabad	6-Dec-17	10:00 - 14:00	Lemon Tree Premier, HITEC City, Plot No. 2, Survey No. 64,
			HITEC City, Madhapur, Hyderabad – 500081, Telangana.
Mumbai	8-Dec-17	10:00 - 14:00	Holiday Inn, Sakinaka Junction, Andheri Kurla Road,
			Andheri East, Mumbai - 400072.
Delhi	11-Dec-17	10:00 - 14:00	Essex Farms, 4, Aurobindo Marg, Near IIT Flyover, New Delhi.
Mumbai	15-Dec-17	10:00 - 14:00	Holiday Inn, Sakinaka Junction, Andheri Kurla Road,
			Andheri East, Mumbai - 400072.
Delhi	18-Dec-17	10:00 - 14:00	Essex Farms, 4, Aurobindo Marg, Near IIT Flyover, New Delhi.
Kolkata	20-Dec-17	10:00 - 14:00	Hotel Novotel and Residencies, CF - 11, Action Area 1C, New Town,
			Rajarhat, Kolkata - 700156.
Chennai	20-Dec-17	10:00 - 14:00	Le Royal Meridien, No. 1, Gst Road, St. Thomas Mount, Chennai.
Chandigarh	27-Dec-17	10:00 - 14:00	Hotel Aroma Complex, Himalaya Marg, Sector 22-C, Chandigarh.

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Experienced crew may also walk in with valid flying documents.



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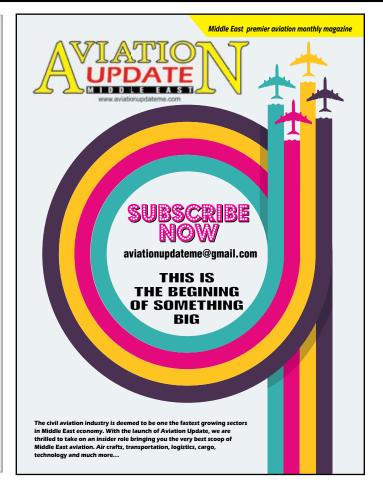
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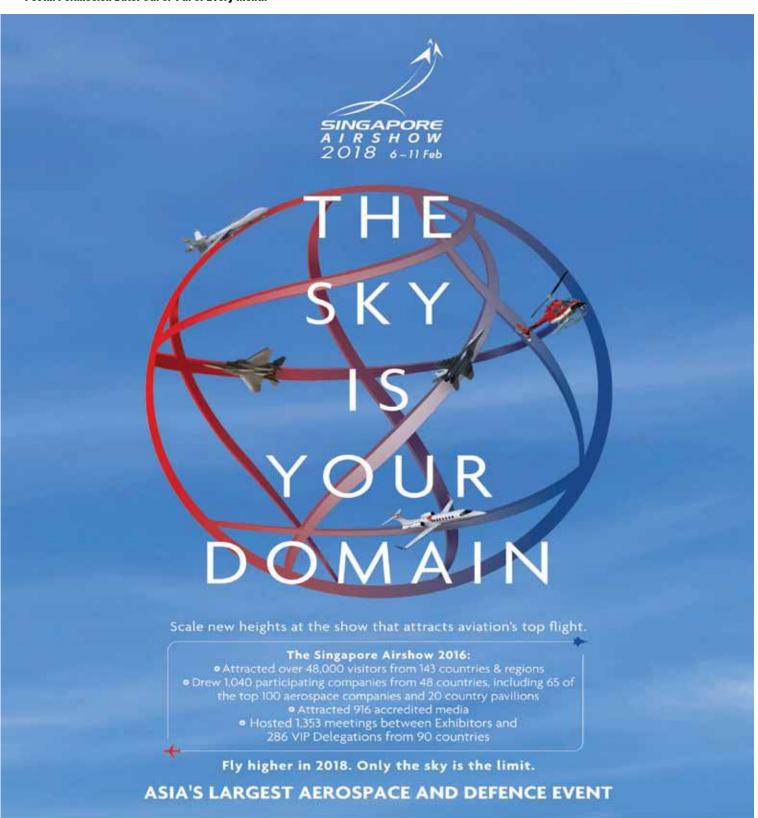
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