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Indian Defence
 Minister takes to
 Skies in an IAF
 Su-30 MKI

## ATTONT UPDATE

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The difference between the impossible and the possible lies in a person's determination

Greetings and Salutations

Dear Readers,

The month of Feb is crucial for Asia Pacific region as Singapore Air Show 2018 will be held between the dates 6-11th Feb 2018. It will provide ample amount of business and networking opportunities to professionals related to aviation industry. The good news is that Aviation Update Magazine team will also be participating in the show to get sharp insights and latest updates on the event. We are actively engaged in all the aviation events whether they are domestic or international. We are also prepared to capture the latest updates on Hyderabad Air show in coming month of March.

Aviation Update Team is committed to bring the best of the aviation industry events for our readers to keep them well informed on anything and everything related to the world of aviation.

The career prospects that exist and will exist in near future in aviation field will provide a great motivation to the patrons wishing to enter aviation. We wish them a great success in the captivating and lucrative aviation sector.

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

Zhanks

**B. Kartikeya**Editor

#### ATR TO TRIPLE ITS ORDERS IN 2017



TR achieved outstanding commercial results in 2017, booking firm orders for 113 aircraft, along with 40 options. The level of firm sales in 2017 tripled the number of orders received in 2016 (36). In 2017, the ATR turboprops once again ranked first among all the sales of regional aircraft below 90 seats.

The turboprop manufacturer delivered 80 aircraft (70 new ATR 72-600s, 8 new ATR 42-600s and 2 second hand ATRs), and reached a book-to-bill ratio of 1.45. ATR secured a solid backlog representing three years of production. ATR also stabilised its annual turnover at US\$ 1.8 billon, among the best performing financial results of its over-35-years history.

In 2017, ATR has sold aircraft in every region of the world and in particular has invested substantially in growing markets. In the last year, ATR has developed its support capabilities with the introduction of two new training simulators, while two additional simulators will be introduced soon. Last year, ATR achieved also the milestone of having 300 of its aircraft covered by the comprehensive total care support Global Maintenance Agreement (GMA).

INDIGO 4TH
 MOST PUNCTUAL
 AIRLINE
 GLOBALLY: OAG
 PUNCTUALITY
 LEAGUE 2018

AG, air travel Intelligence Company has ranked IndiGo as 4th most punctual airline globally in the mega airline category. In its Annual review – Punctuality

League 2018, OAG recognizes the airlines that have consistently clocked highest Ontime performance (OTP) by including ontime performance for the world's Top 20 busiest domestic and international routes, and other categories. IndiGo has been ranked 4 th amongst Top 20 mega airlines (The World's Top 20 operators globally in terms of scheduled flights in 2017) and 9 th amongst Top 20 Low-cost carriers (LCCs) by OTP. IndiGo is the only Indian airline to have made it in the list of top 20 mega airlines.

Punctuality League Report is a comprehensive annual report presented by OAG that reveals rankings of all airlines - mainline, low-cost and by region. The report aims to highlight carriers who have consistently demonstrated high performance and deliver on their promise to get passengers to their destinations in a timely manner. For detailed analysis, the OAG defined OTP as flights that arrive or depart within 14 minutes and 59 seconds (under 15 minutes) of their scheduled arrival/departure times. IndiGo has been recognized amongst major carriers such as Singapore airlines, Qatar airlines, Japan Airlines, Delta Airlines, American Airlines. Southwest, British Airways, Spirit Airline and Jetstar Asia.

Speaking on this recognition, Mr. Aditya Ghosh, President and Whole Time Director, IndiGo said, "We are thrilled ... just can't hide the excitement of having been able to take India and IndiGo to amongst the very best in the world and one of the Top 5 Mega Airlines globally in terms of On-Time performance in the OAG Punctuality League 2018. Flying our planes On Time is one of our core promises to our customers. This achievement reinforces IndiGo's commitment of providing our fliers with an on-time, hassle free experience at low fares, always."

EMIRATES SIGNS
 AGREEMENT
 FOR UP TO 36
 ADDITIONAL A380S



mirates Airline has signed a Memorandum of Understanding (MoU) to acquire up to 36 additional A380 aircraft. The agreement was signed at the airline's headquarters in Dubai by HH Sheikh Ahmed bin Saeed Al Maktoum, Chairman and Chief Executive, Emirates Airline and Group, and John Leahy, Chief Operating Officer - Customers, Airbus Commercial Aircraft. The commitment is for 20 A380s and an option for 16 more with deliveries to start in 2020, valued at US\$16 billion at latest list prices.

Sheikh Ahmed said: "We've made no secret of the fact that the A380 has been a success for Emirates. Our customers love it, and we've been able to deploy it on different missions across our network, giving us flexibility in terms of range and passenger mix. He added: "Some of the new A380s we've just ordered will be used as fleet replacements. This order will provide stability to the A380 production line. We will continue to work closely with Airbus to further enhance the aircraft and onboard product, so as to offer our passengers the best possible experience. The beauty of this aircraft is that the technology and real estate on board gives us plenty of room to do something different with the interiors."

"I would like to thank Emirates, HH Sheikh Ahmed, Tim Clark and Adel Al-Redha for their continued support of the A380," said John Leahy, Chief Operating Officer - Customers, Airbus Commercial Aircraft. "This aircraft has contributed enormously to Emirates' growth and success since 2008 and we are delighted that it will continue to do so. This new order underscores Airbus' commitment to produce the A380 at least for another 10 years. I'm personally convinced more orders will follow Emirates' example and that this great aircraft will be built well into the 2030s."

BOEING PRESENCE
 AT SINGAPORE
 AIRSHOW
 UNDERPINS
 GROWTH
 PROSPECTS IN
 ASIA-PACIFIC
 REGION

5

- F-15 Eagle, F/A-18 Super Hornet, P-8A Poseidon, CH-47 Chinook, AH-64 Apache, and unmanned systems on display
- 737 MAX, 787 and 777X airplane models on exhibit

Boeing will showcase a wide range of products and services at this year's Singapore Airshow, Asia's largest aerospace and defense show, which runs Feb. 6-11. The scale of the company's presence at this year's show reflects the strong growth prospects and opportunities across its commercial, defense and services businesses in Asia-Pacific.

"Singapore is a global aviation hub and the headquarters for our Southeast Asia operations, where we have enjoyed 70 years of presence and partnership," said Skip Boyce, president, Boeing Southeast Asia. "As our product line-up and customer requirements continue to evolve, we are confident and committed to delivering enhanced capabilities to our customers while growing our regional presence."

The Asia-Pacific region is Boeing Commercial Airplanes' fastest growing market with a strong demand for both single and twin-aisle airplanes. In addition to models of the 737 MAX and 787 airplanes that have been delivered to numerous customers in the region, the Boeing exhibit will also showcase a model of the new 777X now in development and build.

Boeing Defense, Space & Security will have a robust line-up of Boeing and customer products on static display at the show. The Republic of Singapore Air Force will display the F-15SG multi-role fighter, and the CH-47 Chinook and AH-64 Apache helicopters. The U.S. Department of Defense will exhibit the P-8A Poseidon and the F/A-18 Super Hornet, alongside the Integrator unmanned aircraft system from Insitu. The Boeing exhibit will also include the Insitu ScanEagle, and the Wave Glider, an ocean surface robot with seabed-to-space autonomous capabilities from Liquid Robotics.

For the first time at the Singapore Airshow, there will be a Boeing Global Services (BGS) exhibit booth. Launched in 2017, Boeing Global Services is the company's newest business unit and is poised for growth through innovative services and support for regional commercial

and defense systems throughout the entire lifecycle. Asia-Pacific is an important growth market for the services business with a strong emphasis on engineering, modifications, upgrades, maintenance, Boeing AnalytX, digital services and training. The Boeing Training and Professional Services campus in Changi, Singapore is Boeing's largest pilot, technician and crew training facility in Asia.

## BOEING'S 787-10 DREAMLINER CLEARED FOR COMMERCIAL SERVICE BY FAA



**B**oeing announced the 787-10 Dreamliner received an amended type certificate (ATC) from the U.S. Federal Aviation Administration (FAA), clearing the airplane for commercial service.

The awarding of ATC caps a successful flight test program that began in March 2017 and involved three flight test airplanes that accumulated about 900 test hours. Boeing's flight test program team took the airplanes through a series of tests to confirm the airplane's handling, systems and overall performance met internal requirements and certification standards to ensure safety of flight.

"We are pleased to have met the rigorous standards set forth by the FAA and are eager to bring the airplane to market for our valued customers," said Brad Zaback, vice president and general manager of the 787 program. "After years of design and testing, our team has proven the quality, safety and reliability of the newest member of the Dreamliner family and we look forward to seeing the airplane in service later this year."

Other aviation regulatory agencies are expected to follow the FAA's lead and certify the airplane before it enters service.

## INDIGO COMMENCES RAJAHMUNDRY OPERATIONS



Strengthening its positioning further as India's largest and fastest growing low-cost carrier, IndiGo expanded its regional network by commencing ATR operations from Rajahmundry. Honourable Deputy Chief Minister and Home Minister Nimmakayala China Rajappa along with Mr. Sanjeev Ramdas, Executive Vice President of Customer Service & Operations Control, IndiGo flagged-off the flight from Rajahmundry to Chennai at Rajahmundry Airport.

Rajahmundry will be connected to Hyderabad with twice daily frequencies, and one direct daily frequency each on Rajahmundry–Bangalore–Rajahmundry and Rajahmundry–Chennai–Rajahmundry sectors. IndiGo is the only airline that connects Rajahmundry with direct flights to three major metros of southern India: Chennai, Bangalore and Hyderabad from day one of its operations.

#### FIRST BELUGAXL TRANSPORTER ROLLS OFF ASSEMBLY LINE



 $\mathbf{T}$  he first structurally complete airframe for the new BelugaXL rolled out from

its assembly hangar in Toulouse, France this month. Once operational, a fleet of these next-generation airlifters will be used to transport completed sections of Airbus aircraft among the company's European production sites and to its final assembly lines in France, Germany and Spain.

The BelugaXL is one of the most voluminous aircraft in existence, and everything about it speaks to that fact. With a bulging upper forward fuselage and enormous cargo area, the BelugaXL is hardly recognizable as the outsized airlifter version of the Airbus A330-200 jetliner from which it is derived. "We have the A330 as a foundation," said Bertrand George, head of the BelugaXL programme, "but many changes have been successfully designed, introduced into the aircraft and tested. Transforming an existing product into a super transporter is not a simple task."

This initial BelugaXL is expected to be flying by mid-2018. "The whole team is really looking forward to seeing its first flight and, of course, its smiling livery," said George, referring to the supersized smile that will be painted across the 'face' of the transporter, the winning design of six options presented to Airbus employees for a vote in early 2017.

Ground testing for the No. 1 BelugaXL before first flight

Before that can happen, the aircraft will undergo a months-long battery of tests after installation of its two jet engines, ensuring each of the BelugaXL's systems function as intended. All the while, said George, "We will perform bench tests in Toulouse and Hamburg, Germany – testing our systems on flight simulators and in laboratories" as well as using hydraulic jacks to simulate flight loads on full-scale copies of specific joints between the new upper bubble and A330's lower fuselage.

"The data from these tests will be used to clear the aircraft for flight and, later on, to attain type certification," the official pronouncement of the aircraft's safety and airworthiness, said George.

While the first structurally complete BelugaXL moves into its testing phase, the second A330 to be converted into a BelugaXL arrived on schedule in Toulouse to begin its integration process. George noted that with lessons learned from the production of the first transporter, the assembly time for the

second is expected to be about two months shorter.

The BelugaXL programme was launched in November 2014 to address Airbus' increasing transport requirements. At six metres longer, one metre wider and with a payload lifting capacity six tonnes greater than the BelugaST transporter version it is replacing, the BelugaXL will be able to transport both wings of the A350 XWB jetliner at once, instead of the single wing currently accommodated on the BelugaST. All told, five BelugaXLs are scheduled to enter service for Airbus' airlift needs.

#### SCOOT TO TAKE OVER 3 SILK AIR ROUTES



SilkAir, the regional wing of Singapore Airlines (SIA), will be transferring its services to Langkawi in Malaysia, Pekanbaru in Indonesia and Kalibo in the Philippines to Scoot, the low-cost subsidiary of SIA. SilkAir's last Langkawi, Pekanbaru and Kalibo services are scheduled for 8 April, 30 May and 28 June 2018 respectively. Currently, SilkAir flies three times weekly to each destination.

The transfer of the three services to Scoot will optimise aircraft utilisation within the SIA Group, at the same time better matching travel demand. Scoot already operates three and four weekly services to Langkawi and Kalibo respectively, while Pekanbaru will be a new addition to the network. With the transfers, Scoot will progressively adjust its services to Langkawi and Kalibo in the coming months to provide more options and convenience to customers. Scoot also targets to commence sales for Pekanbaru in the first half of 2018, subject to final regulatory approval.

"We are constantly reviewing our route operations to ensure optimisation of the SIA Group's resources. The transfer of

these three services, Langkawi, Pekanbaru and Kalibo, is a move to do just that and also presents a better match of capacity to demand," commented Mr. Foo Chai Woo, Chief Executive SilkAir.

SilkAir will maintain its flights to three other points in Malaysia, namely Kota Kinabalu, Kuala Lumpur and Penang. For Indonesia, the airline will continue to operate to 10 other points: Balikpapan, Bandung, Denpasar (Bali), Lombok, Makassar, Manado, Medan, Semarang, Surabaya and Yogyakarta. In the Philippines, SilkAir will continue to operate flights to Cebu and Davao. With the addition of Pekanbaru, as well as Kuantan and Berlin which will be launched in February and June 2018 respectively, Scoot's network will span 66 cities across 18 countries/ territories. Specifically in Indonesia, Scoot's destination count will rise to five; the existing destinations being Denpasar (Bali), Jakarta, Surabaya and Palembang.

#### E190-E2 FLIGHT TEST RESULTS CONFIRM E2 AS MOST EFFICIENT SINGLE AISLE JET



s the E190-E2 new generation narrow-body jet approaches certification, Embraer announces some final results from flight tests confirming that the aircraft is better than its original specification and even more efficient than other single aisle aircraft. In fuel consumption, the E190-E2 proved to be 1,3% better than originally expected, which represents a 17,3% improvement when compared to the current generation E190, and nearly 10% better than its direct competitor.

The E190-E2 also becomes the most environmentally friendly aircraft in the segment, with the lowest level of external

noise and emissions. The cumulative margin to ICAO Stage IV noise limit increases from 17 to 20 EPNdB, which results in 2 EPNdB better than its direct competitor.

Rodrigo Silva e Souza, Marketing VP, Embraer Commercial Aviation, said, "this means that when our first operator, Widerøe, operates its inaugural E190-E2 flight on April 24th from Bergen to Tromsø, it will be the first in-service flight of the world's most efficient and eco-friendly narrow-body jet. This is an immense achievement for our team and means additional value delivered to our customers."

Flight test results also confirmed the E190-E2 to be better than its original specification in takeoff performance. The aircraft's range from airports with hot-and-high conditions, such as Denver and Mexico City, increases by 600 nm compared to current generation aircraft. Its range from airports with short runways, such as London City also increases by more than 1,000 nm allowing the aircraft to reach destinations like Moscow and the north of Africa.

E190-E2 also becomes the aircraft with the longest maintenance intervals in the single aisle market with 10,000 flight hours for basic checks and no calendar limit in typical E-Jets utilization. This means additional 15 days of aircraft utilization in a period of ten years compared to current generation E-Jets.

Another key program target where the E190-E2 obtained better results than initial expectations is in pilots transition training time. Pilots of Current generation E-Jets will need only 2.5 days of training and no full flight simulator to fly an E2. "Decreasing the training burden for pilots transitioning from E1 is another huge reduction in both time and cost for our operators. This coupled with the E2 family's world leading fuel efficiency and lowest noise footprint, make the E2 the most cost effective aircraft in its segment by every measure", explained Silva.

#### AIRBUS ROLLS OUT FIRST A321NEO ACF

f A irbus has completed assembly of the first A321neo ACF (Airbus Cabin

Flex) at its facilities in Hamburg, Germany. The aircraft, powered by CFM LEAP-1A engines, will undergo ground tests prior to its scheduled first flight in the coming weeks. First delivery of an A321neo ACF to a customer is scheduled for mid-2018.

The A321neo ACF is the latest addition to the successful A320 Family. By applying modifications to the fuselage, the ACF enables more flexible cabin configurations for up to 240 passengers. Compared to the previous A321 variant, the most visible modifications are a new rear section and a modified passenger door configuration, where the door located forward of the wing is removed and new overwing emergency exits in the centre section are introduced. The A321neo ACF is an option today and will become standard for all A321neos around 2020.

The A321neo ACF is the base for a longer range variant known as the A321LR. The A321LR has an increased MTOW (Maximum Take Off Weight) of 97 tonnes and a third underfloor fuel tank allowing airlines to increase its range to 4,000 nautical miles for intercontinental flights. The first delivery of an A321LR is targeted for the fourth quarter of 2018.

The A321 is the largest member of the A320 Family, seating up to 240 passengers, depending on cabin configuration. Incorporating the latest engines, aerodynamic advances and cabin innovations, the A321neo offers a reduction in fuel consumption of at least 15 percent per seat from day one and 20 percent by 2020.

## ETHIOPIAN AIRLINES TO RE LAUNCH ZAMBIA'S NATIONAL CARRIER



 ${\bf E}$  thiopian Airlines, the largest Aviation Group in Africa and SKYTRAX certified

Four Star Global Airline, is pleased to announce that it has finalized shareholders agreement with the Government of Zambia for the re-launch of Zambia Airways. The Government of Zambia will be the majority shareholder with 55% and Ethiopian will have 45% stakes in the airline.

Mr. Tewolde Gebremariam, Group CEO of Ethiopian Airlines remarked: "In line with our Vision 2025 multiple hubs strategy in Africa, we are very happy that the discussions with the Zambian government have been crowned with success. The launching of Zambia Airways will enable the travelling public in Zambia and the Southern African region to enjoy greater connectivity options, thereby facilitating the flow of investment, trade and tourism, and contributing to the socio-economic growth of the country and the region.

As an indigenous and truly Pan-African airline, we firmly believe that it is only through partnerships among African carriers that the aviation industry of the continent will be able to get its fair share of the African market, currently heavily skewed in favor of non-African airlines, and play its rightful role in availing efficient air connectivity within Africa as well as with the rest of the world. "

The airline is meant to initially serve national and regional destinations before embarking on international flights. The Government of Zambia will be the majority shareholder with 55% and Ethiopian will hold 45% in the airline. The establishment of multiple hubs in Africa being an overarching strategy of Ethiopian under its Vision 2025, the national flag carrier currently operates hubs in Lomé (Togo) with ASKY Airlines and Malawian in Lilongwe (Malawi).

#### GULFSTREAM DELIVERS FINAL G450



Gulfstream announced that it has delivered the final Gulfstream G450 as it prepares to usher in the next generation of business aviation with the all-new Gulfstream G500.

"For the past 12 years, the G450 has been one of the best-selling business jets in the industry, beloved by pilots and passengers alike for its technological advances, smooth handling, impressive range and unsurpassed passenger comfort," said Mark Burns, president, Gulfstream. "During its 30-year history, the GIV series transformed business aviation, and the G500 is already well on its way to doing the same, with the industry's first active control side sticks and the most integrated application of touch-screen controls in the flight deck."

A performer from the start, the G450 entered service in 2005 after demonstrating even more range than originally anticipated – 4,350 nautical miles/8,056 kilometers at Mach 0.80. The aircraft can sprint 3,500 nm/6,482 km at Mach 0.85. The G450 fleet, comprising more than 360 aircraft, has amassed more than 964,000 hours and more than 461,000 flights.

"The G450 made its mark in aviation history and remains an important member of the Gulfstream family. We will continue to provide industry-leading product support and sustaining engineering for our G450 customers," Burns said.

Like the G450, the G500 will deliver more range than originally announced. The aircraft will fly 5,200 nm/9,630 km at Mach 0.85 and 4,400 nm/8,149 km at Mach 0.90. Five G500 aircraft are undergoing flight testing, with type certification anticipated in early 2018.

 A350-1000 BEGINS DEMONSTRATION TOUR IN THE MIDDLE EAST AND ASIA-PACIFIC



The A350-1000, the newest member of Airbus' leading wide body family, has embarked on a three-week demonstration tour to the Middle East and Asia-Pacific region. The demonstration tour follows the completion of a successful flight test campaign, which lasted less than one year and culminated in joint EASA and FAA type certifications, demonstrating the aircraft's excellent design, performance and maturity. The A350-1000 tour comes ahead of the first customer delivery to Qatar Airways in the coming weeks.

During the tour, the A350-1000 flight test aircraft (MSN065) will visit 12 destinations to demonstrate the aircraft's exclusive features to airlines. The itinerary will see it travel over 30,000 nautical miles / 55,500 kilometres, with stops in Doha, Muscat, Hong Kong, Seoul, Taipei, Hanoi, Singapore, Bangkok, Sydney, Auckland, Tokyo and Manila.

The aircraft will stop for several days in Singapore, where it will be on static display from 6 to 8 February at the Singapore Airshow 2018.

MSN065 is one of three Airbus A350-1000 test aircraft and is equipped with a fully functional cabin (40 business class, 36 economy plus class and 219 comfort economy class seats). The demonstration flights will be operated by Airbus flight test

The A350-1000 is the latest member of the A350 XWB Family, showing high level of commonality with the A350-900 with 95 percent common systems part numbers and the same Type Rating. As well as having a longer fuselage to accommodate 40 more passengers than the A350-900 (in a typical three-class configuration), the A350-1000 also features a modified wing trailing-edge, new six-wheel main landing gears and more powerful Rolls-Royce Trent XWB-97 engines. Along with the A350-900, the A350-1000 is shaping the future of air travel by offering unprecedented levels of efficiency and unrivalled comfort in its 'Airspace' cabin. With its additional capacity, the A350-1000 is perfectly tailored for some of the busiest long-haul routes. To date, 11 customers from five continents have placed orders for a total of 169 A350-1000s.

## P3 ACADEMY INAUGURATES NEW CENTER OF EXCELLENCE FOR AEROSPACE DESIGN TRAINING



3 Engineering and Consulting launched a Center of Excellence (CoE) for Aerospace Design Training in association with NSDC and AASSC (Aerospace & Aviation Sector Skill Council) at Whitefield, Bengaluru. The center was inaugurated by Shri AnantkumarHegde, Hon'bleUnionMinister of State for Skill Development & Entrepreneurship, Government of India. P3 along with NSDC will be investing more than \$ 5 million to train and skill over 10,000 fresh & experienced engineers over 7 years. The courses coveringtopics like Aerostructures, Systems Integration, Avionics, Aerodynamics and Technical Publication will be aligned with the knowledge and performance criteria defined as per the NOS (National Occupational Standards) developed by AASSC.

This CoE will provide an end to end solution for aerospace companies, from the mobilization of students, training, and evaluation to the induction/placement. This will facilitate availability of industry ready workforce for aerospace design and manufacturing sector. In addition, the CoE will be used for up skilling and reskilling of existing employees. Equipped with latest training aids, design software, specific labs for practical exposure and best practices; it will be a world class skill development center. The trainers will include experts from universities, subject matter experts and professionals from large aerospace OEM's and suppliers.

Speaking on Foundation ceremony of Centre of Excellence for Aerospace Design at Whitefield, Bangalore, Shri Anantkumar Hegde — Minister of State for Skill

Development and Entrepreneurship said, "Through the right skilling, you could change the world. If you go through our historical pages you can ask who invented airplanes. History says Wright brothers invented the airplane in 1905. But much before that, in 1895, Mr. Shivkar Talpade, tried and flew his own created plane for one and half an hour at Chowpatty, Mumbai. Unfortunately, we have forgotten that." He added, "Government of India is entirely with you for providing any sort of assistance. Aerospace and aviation is a budding and one of the most aspirational industries in India and we will have to work together to capitalize it to its full potential in the country. I can assure you on behalf of Indian Government that we will be supportive of any such initiative in aviation sector. So that in future, in your life, you can do anything you dream of doing."

Speaking on the occasion Ashish Mishra, CEO P3 India said "Aerospace sector is poised for exponential growth in India. This growth will be in the areas of Aerospace Manufacturing, Airlines operation, MRO and Engineering. Close to 1.5 million jobs will be created in aviation sector over the next 10 years. This CoE will address the huge gap in the skill required by engineering graduates to perform the technical jobs. P3 has identified India as a major contributor to Aerospace sector, we are fully committed to contribute towards Skill India program and drive the change"

The Center will be accredited to AASSC and compliant with the National Skills Qualification Framework (NSQF).D. Peter Immanuel, CEO, AASSC said "The CoE will run higher level skill development programs in Aerospace Design & Development subsector. The skill initiative by P3 Group will provide an ideal platform to aid Design in India and Make in India efforts. Our vision is to ensure that there is supply of adequately skilled workforce to meet the high standards and expectations of aerospace industry. Availability of large skilled manpower could also attract more investments in this space."

INDIGO
 COMMENCES
 COLOMBO
 OPERATIONS



In its endeavour to strengthen its growing network, IndiGo, India's largest and fastest growing carrier commenced its operations in Colombo, Sri Lanka. With touch-down of 6E-1202 (Chennai-Colombo) on Saturday, January 20th at Bandaranaike International Airport; Colombo became its 8th international and 49th overall destination on IndiGo's ever growing network.

Both corporate and leisure passengers travelling to and from Colombo will get the opportunity to experience on-time, affordable and a hassle-free travel experience that IndiGo is synonymous with. These new flights will further consolidate IndiGo's position as the fastest growing airline in India with over 150 Airbus A320 and three ATR aircraft strong fleet, operating over 1000 daily flights, connecting 49 destinations.

Commenting on the launch, Capt Ashim Mittra, VP Flight Operations, IndiGo said," IndiGo is delighted to commence its new daily services to and from Colombo. These new connections will not only boost corporate and leisure travel but will also contribute to significant growth in cross border trade and commerce. We are hopeful that these new flights will provide affordable and unmatchable travel experience to our passengers across the country and beyond."

ADIENT, BOEING
 LAUNCH NEW
 COMPANY TO
 DESIGN AND BUILD
 AIRPLANE SEATS

dient and Boeing announced the formation of Adient Aerospace, a joint venture that will develop, manufacture, and sell a portfolio of seating products to airlines and aircraft leasing companies. The seats will be available for installation on new airplanes and as retrofit configurations for aircraft

produced by Boeing and other commercial airplane manufacturers.

The joint venture between Adient, the global leader in automotive seating, and Boeing, the world's largest aerospace company, addresses the aviation industry's need for more capacity in the seating category, superior quality and reliable ontime performance. Adient Aerospace will benefit from the world-class engineering teams and innovative cultures at both companies, as well as shared expertise in managing complex, global supply chains.

"Adient has a strong set of transferable competencies that will offer a unique opportunity to create value for our company and for Boeing, our shareholders and the broader commercial aircraft market," said Adient chairman and CEO Bruce McDonald. "To enhance the customer experience for passengers, airlines and commercial airplane manufacturers, we will apply our unmatched expertise for comfort and craftsmanship along with our reputation for operational excellence."

"Seats have been a persistent challenge for our customers, the industry and Boeing, and we are taking action to help address constraints in the market. Adient Aerospace will leverage Boeing's industry leadership and deep understanding of customer needs and technical requirements, to provide a superior seating product for airlines and passengers around the world," said Kevin Schemm, senior vice president of Supply Chain Management, Finance & Business Operations and chief financial officer for Boeing Commercial Airplanes. "This joint venture supports Boeing's vertical integration strategy to develop in-house capabilities and depth in key areas to offer better products, grow services and generate higher lifecycle value."

#### BOEING UNVEILS NEW UNMANNED CARGO AIR VEHICLE PROTOTYPE

**B** oeing unveiled a new unmanned electric vertical-takeoff-and-landing (eVTOL) cargo air vehicle (CAV) prototype

that will be used to test and evolve Boeing's autonomy technology for future aerospace vehicles. It is designed to transport a payload up to 500 pounds for possible future cargo and logistics applications.

"This flying cargo air vehicle represents another major step in our Boeing eVTOL strategy," said Boeing Chief Technology Officer Greg Hyslop. "We have an opportunity to really change air travel and transport, and we'll look back on this day as a major step in that journey."

In less than three months, a team of engineers and technicians across the company designed and built the CAV prototype. It successfully completed initial flight tests at Boeing Research & Technology's Collaborative Autonomous Systems Laboratory in Missouri.

Boeing researchers will use the prototype as a flying test bed to mature the building blocks of autonomous technology for future applications. Boeing HorizonX, with its partners in Boeing Research & Technology, led the development of the CAV prototype, which complements the eVTOL passenger air vehicle prototype aircraft in development by Aurora Flight Sciences, a company acquired by Boeing late last year.

"Our new CAV prototype builds on Boeing's existing unmanned systems capabilities and presents new possibilities for autonomous cargo delivery, logistics and other transportation applications," said Steve Nordlund, Boeing HorizonX vice president. "The safe integration of unmanned aerial systems is vital to unlocking their full potential. Boeing has an unmatched track record, regulatory know-how and systematic approach to deliver solutions that will shape the future of autonomous flight."

Powered by an environmentally-friendly electric propulsion system, the CAV prototype is outfitted with eight counter rotating blades allowing for vertical flight. It measures 15 feet long (4.57 meters), 18 feet wide (5.49 meters) and 4 feet tall (1.22 meters), and weighs 747 pounds (339 kilograms).

## FRÉDÉRIC TORREA BECOMES CORPORATE

## SECRETARY AND GENERAL COUNSEL OF ATR



Prédéric Torrea, 53, has been appointed Corporate Secretary and General Counsel of ATR. In addition to his duties as General Counsel of ATR (since 2009) and Chief Compliance Officer (since 2015), he will now be responsible for Corporate Affairs, Institutional Relations and Environment, Communications, Facility Management and IT systems. As a member of the ATR Executive Committee, he will be reporting to the CEO, Christian Scherer.

Frédéric Torrea began his career as legal counsel at Aerospatiale in 1991. In 1996, he joined WorldSpace Inc. in Washington D.C., a company specialising in satellite digital radio systems, before becoming President of the French subsidiary, WorldSpace France, in 1998. At the end of 2001, he became legal counsel for Airbus SAS, covering various activities relating to contract and intellectual property law. Before assuming responsibility for the ATR Legal Department in 2009 and from 2006, Frédéric Torrea was the Head of the Airbus Procurement Contracts Department.

In his new position as Corporate Secretary of ATR, he succeeds Laurence Rigolini, who occupied the position from 2014 to 2017. He holds a Master's degree in Business Law from Toulouse 1 Capitole University, as well as a Master's in Economics and Finance from the Toulouse Institute of Political Studies.

## TURKISH AIRLINES ORDERS 3 MORE 777 FREIGHTERS



Turkish Airlines announced that the carrier ordered three more 777 Freighters in December 2017. The new order came weeks after the carrier took delivery of two of the large cargo jets as part of its plan to further expand its freight business.

"These freighter orders will surely contribute to our significant target for establishing a young and efficient cargo fleet," said M. Ilker Aycı, Chairman of the Board and the Executive Committee of Turkish Airlines. "The new aircraft will be delivered this year and will provide us with additional flexibility to serve more destinations while we continue to develop our global freight service."

"The 777 Freighter is the largest and most capable twin-engine freighter in the world today," said Marty Bentrott, senior vice president of Sales, Middle East, Turkey, Russia, Central Asia and Africa, Boeing Commercial Airplanes. "We're pleased world-class customers like Turkish Airlines recognize the value of the 777 Freighter's long range and large payload capability."

The 777 Freighter is the world's longest-range twin-engine freighter and is based on the 777-200LR (Longer Range) passenger airplane. The jet can fly 4,900 nautical miles (9,070 kilometers) with a full payload of 112 tons (102 metric tonnes or 102,000 kg). The airplane's range capability translates into significant savings for airlines: fewer stops and associated landing fees, less congestion at transfer hubs, lower cargo handling costs and shorter cargo delivery times.

## GULFSTREAM G500 EMBARKS ON WORLD TOUR



Gulfstream Aerospace Corp. today announced that its all-new Gulfstream G500 business jet has begun a world tour to give current and potential customers an opportunity to experience firsthand the aircraft's cutting-edge technology, unparalleled comfort and superior craftsmanship. The 12-country tour began this month at Dallas Love Field and will conclude in June.

"This is a momentous year for the G500, with the aircraft's planned certification and entry into service," said Mark Burns, president, Gulfstream. "It's an ideal time for customers to explore an aircraft that is already noted for its large, wide cabin, outstanding performance and industry-leading technology. It also gives us an opportunity to thoroughly test and examine the fully outfitted interior as we prepare for the G500's service entry."

The G500's cabin is optimized for comfort and productivity with its low sound levels, 100 percent fresh air, industry-leading altitude and 14 panoramic windows. Along with business aviation's first active control sidesticks, the aircraft's award-winning Symmetry Flight Deck™ includes 10 touch screens and incorporates a third-generation Gulfstream Enhanced Vision System, Synthetic Vision-Primary Flight Display and Head-Up Display II.

The aircraft can fly 5,200 nautical miles/9,630 kilometers at its long-range cruise speed of Mach 0.85, providing operators even greater mission flexibility over the aircraft's original 5,000-nm/9,260-km range. At its high-speed cruise of Mach 0.90, the G500 has 4,400 nm/8,149 km of range, a 600-nm/1,111-km increase over its projected range of 3,800 nm/7,038 km. Five G500 aircraft are undergoing flight testing, with type certification anticipated in early 2018.

The G500 will stop in select cities, including Atlanta, New York, Chicago, Milan, Moscow, Beijing and Melbourne

## MALAYSIA AVIATION GROUP APPOINTS NEW COO FOR MALAYSIA AIRLINES BERHAD

alaysia Aviation Group (MAG) announced the appointment of Ahmad Luqman Mohd Azmi as the new Chief Operations Officer (COO) of Malaysia Airlines Berhad (MAB), effective 1 February 2018. The position was left vacant when then COO, Izham Ismail was appointed Group CEO.

In announcing the appointment, Izham said, "On behalf of the Board of MAG, I am pleased to welcome Lugman to this new role. He is an internal home grown talent who started his career with Malaysia Airlines as a management trainee. With over 20 years with the company, Lugman has vast knowledge and experience to draw upon when leading the Operations and Engineering divisions. With his six sigma training and recently completed Business Leader Development Programme from the University of Oxford, I am confident that he is well prepared to take on the challenge of bringing these two key functions to new levels of efficiency."

Prior to his appointment as COO, Luqman was CEO of MAB Kargo, the cargo subsidiary of MAG, a role he has held since September 2015. As CEO he was responsible for the strategic formulation and development of the Group's cargo business strategies and direction.

Under his tenure, MAB Kargo saw an 18% growth in business volume through freighter network realignment and strategic partnerships. Luqman led a transformation programme for MAB Kargo that further strengthened its position as the leading air cargo carrier in Malaysia. This included a digital transformation to capitalize on the growth of e-Commerce business in the region.

During his time with MAB Kargo, Luqman has served in various positions covering cargo terminal operations, system operations and sales. He was instrumental in developing and implementing cargo processes for the Advanced Cargo Centre in KLIA as well as the Penang Cargo Centre.

## VISTARA ANNOUNCES THE ADDITION OF CHENNAI TO ITS NETWORK



istara announced the addition of Chennai to its steadily expanding network, making it the 22nd destination on the airline's network. Effective February 15, 2018, Vistara will operate a daily direct flight between Delhi and Chennai, and increase the frequency to twice daily from March 1, 2018, providing convenient same-day return options in both directions and onward via Delhi to other destinations across the country. Vistara will also connect Chennai to Port Blair with a daily direct flight between the two cities, effective March 1, 2018. Bookings are now open on all channels, with one-way fares for Delhi - Chennai (economy class) starting INR 3,099 all-in, and INR 3,699 all-in for Chennai - Port Blair.

As Vistara operates from the state-of-theart Terminal 3 in Delhi, travelers will enjoy a superior experience, and those connecting to and from international flights at Delhi can seamlessly proceed to international transfers for same-terminal connections.

Mr. Leslie Thng, CEO, Vistara, said, "We're delighted to take the 'new feeling of flying' to Chennai, a city we have long wished to serve. Chennai represents modern India in a unique way, being a thriving metropolis; a business and cultural hub that appeals to corporate and leisure travellers alike. Additionally, given the high demand on the Chennai - Port Blair route due to deep economic and cultural ties, the addition of Vistara's service will offer more choices to customers on both ends. Chennai truly is a landmark addition to our network, and there couldn't be a better time for this than the start of the New Year. We are confident that travellers will be delighted to experience our award-winning service on the new routes."

## QATAR AIRWAYS CARGO RECEIVES ENVIROTAINER QEP ACCREDITATION



atar Airways Cargo announced that it has received the Qualified Envirotainer Provider Training and Quality Programme (QEP) accreditation at five of its destinations: Amsterdam, Basel, Paris, Chicago, and its hub, Doha, Qatar.

The QEP programme recognises air cargo carriers that operate Envirotainer containers in compliance with Good Distribution Practice (GDP). By receiving QEP accreditation, Qatar Airways Cargo has proven its credibility in providing its global customers first-rate air transportation of pharmaceutical products.

Qatar Airways' Acting Chief Officer Cargo, Mr. Guillaume Halleux, said: "Qatar Airways Cargo has been managing Envirotainers since 2015 to transport pharmaceuticals. We are proud to receive the QEP accreditation that acknowledges our high standards in handling Active pharma containers throughout our network, thereby maintaining the efficacy of pharmaceutical products. As one of the leading international cargo carriers, we remain committed to offering a seamless cool chain to our customers through constant innovation and enhancement of our service quality."

Mr. Bourji Mourad, Global Head of Partner Management at Envirotainer, said: "Our longstanding relationship with Qatar Airways Cargo continues to evolve and grow. This much-deserved QEP Accreditation is another positive step forward, ensuring that key industry standards are met regarding the correct and safe handling of all types of containers and technologies offered by Envirotainer. The ultimate goal is safer transportation of healthcare products by air

around the globe. Without a doubt, much was invested to achieve this milestone. Well done to all those involved in making this happen."

 AIRASIA AND UBER PARTNER FOR SEAMLESS, AFFORDABLE, CONVENIENT TRAVEL



ber and AirAsia are partnering together to help provide a seamless, affordable and convenient door-to-door experience for travellers. This innovative partnership will go beyond offering promo codes and discounted rides and will include joint marketing efforts and technological integration.

Commenting on the partnership, Brooks Entwistle, Uber Chief Business Officer, Asia Pacific said, "Uber is thrilled to partner with AirAsia to offer customers exactly what they're asking for - a seamless, affordable, and convenient travel experience. By working together, we can provide a service that allows customers to request their Uber ride to the airport in step with their itinerary and have their Uber driver partner waiting for them when their flight lands. So, whether you're trying to get home to see your family, or heading to an important business meeting; your travel experience should be seamless, from door-to-door!"

Tony Fernandes, AirAsia Group Chief Executive Officer, said, "AirAsia is always looking to complement its award-winning inflight experience with services outside the plane that meet our exacting standards. We have found the right ride partner in Uber. Working with Uber allows our guests to plan their entire trip from the moment they step out of their home right until they arrive at their destination, providing amazing travel comfort and peace of mind."

The two companies will work together to help passengers get home or to work, or to the airport and back more seamlessly in the 52 cities in 16 markets across Asia Pacific and the US, where AirAsia operates and the Uber app is available.

AirAsia will incorporate a "deeplink" feature that allows Uber riders to request or schedule rides\* when confirming, booking or checking in for flights. New users to the Uber network will also enjoy promo codes for free or discounted rides when they register their account and use the promo code "AIRASIA". To ensure the success of this partnership, both companies will also embark on joint marketing efforts.

#### INDIGO Q3 NET JUMPS 56.4% AT RS 762.03 CRORE

InterGlobe Aviation, parent of budget carrier IndiGo, reported more than a 50% jump in net profit at Rs 762.03 crore in the three months ended December on the back of better revenue management and credit from manufacturers.

The firm posted a net profit of Rs 487.25 crore in the December quarter of 2016-17. Revenue from operations rose 23.94% to Rs 6,177.82 crore from Rs 4,986.49 crore in the year-ago period, the company said in a regulatory filing on Wednesday.

"I am pleased to report profit after tax of of Rs 7.6 billion for the quarter. At the same time, I am happy to announce that we delivered the promise of starting our regional operations with our ATR aircraft, which will enable us to provide connectivity to many more cities in India," IndiGo president and whole-time director Aditya Ghosh said.

"Last quarter was special to us as we carried 200 million customers and now operates more than a thousand flights a day," he added.





#### THE DESTINATION FOR THE AIRCRAFT INTERIORS INDUSTRY.

#### Aircraft Interiors Expo 2018

10-12 April 2018, Hamburg Messe, Germany

Aircraft Interiors Expo is the world's market leader event dedicated to airlines and the supply chain to source the latest innovations, technologies and products for the cabin interiors, inflight entertainment, connectivity and passenger comfort industries.

Register your interest today www.aircraftinteriorsexpo.com



World Travel Catering & Onboard Services EXPO 16 - 12 April 2014

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## THE GULFSTREAM G650ER EXTENDING THE REACH, LEADING THE CLASS

Glistream's newest flagship, the G650ER, extends the nonstop reach of the industry's highest performance longrange business aircraft to 7,500 nautical miles/13,890 kilometers at Mach 0.85. Flying even faster at Mach 0.90, the G650ER will carry eight passengers 6,400 nautical miles/11,853 kilometers. Both are feats that no other business aircraft in the world can achieve.

The Gulfstream G650ER-establishing a new world standard for performance

#### THE G650ER RANGE CRUISE FARTHER FASTER THAN EVER

The range capability of the Gulfstream G650ER isn't hypothetical—it's reality, having already flown and documented key city-pair connections including Hong Kong

to New York; and Los Angeles, California, to Melbourne, Australia.

The G650ER boasts a maximum gross weight 4,000 pounds/1,814 kilograms greater than the G650, which can be an advantage in adding fuel margin or increasing long-range cruise speed on ultralong-range routes.

#### THE G650ER FLEXIBILITY DOING WHAT NO OTHER AIRCRAFT CAN

The additional range capability of the G650ER significantly increases the number of nonstop connections possible between cities. From Dubai, fly nonstop to Atlanta. From Hong Kong, most of the U.S. Eastern Seaboard is now a direct flight. A dozen cities now connect nonstop with Sydney, including Riyadh and Dallas.

In today's fast-paced international

marketplace, the speed and quality of establishing business connections matter. If your mission includes flights half a world away, the G650ER offers the advantage of flying the fastest and longest routes possible by any business aircraft.

With a 104,000 pound/47,173 kilogram maximum gross weight, the Gulfstream G650ER provides the mission flexibility to fly longer routes at higher cruise speeds or carry heavier payloads on shorter missions. Cruising at near supersonic speed (0.90 Mach) the G650ER will comfortably carry eight passengers 6,400 nautical miles/11,853 kilometers.

No other platform in business aviation offers the combined utility of range, speed, performance and payload.

#### THE G650ER INTERIOR

#### AN ENVIRONMENT OF STYLE AND COMFORT

A Gulfstream G650ER cabin provides the ultimate blend of form and function. The choice of 12 predefined floorplans and the option to customize offers owners control of their environment whether it's the need for a private stateroom, a large conference space or individual work areas.

Wide seats and generous aisle spaces are benefits of the G650ER, and the sense of spaciousness is further enhanced by 16 Gulfstream panoramic windows, the largest in the industry, that stream sunlight into the cabin and galley.

The G650ER cabin is replenished with 100 percent fresh air every two minutes. And with the lowest cabin altitude in the class, matched only by its sister ship, the Gulfstream G650, passenger heart and lungs can more easily oxygenate the blood, which reduces fatigue and ensures a more alert and refreshed arrival many time zones later. At a cruise altitude of 45,000 feet/13,716 meters, a G650ER cabin is pressurized to an altitude of 4,060 feet/1,237 meters. That cabin altitude is almost two times lower than commercial airlines and significantly better than any non-Gulfstream aircraft in the large-cabin class.



Handcrafted seats and divans offer the utmost in passenger comfort.

Standard features, including digital audio



and high-definition video equipment, 26-inch/66-centimeter widescreen televisions, convection oven, porcelain dinnerware, flatware and stemware with fitted storage, combine to outfit the G650ER with everything needed for flawless entertaining. Cruising at 51,000 feet/15,545 meters above commercial traffic and weather, the Gulfstream G650ER is truly high-class.

#### THE G650ER CABIN TECHNOLOGY HIGH-ALTITUDE CONNECTIVITY

The cabin of the Gulfstream G650ER is designed to allow passengers to intuitively interact with their environment.

With the Gulfstream Cabin Management System (GCMS), passengers control temperature, lighting, window shades and entertainment devices with Apple iOS or select Google Android touch-screen smartphones and tablets.

Apple iPod touch units or Google Android devices are provided to control the cabin, but the Gulfstream Cabin Management app is also available as a free mobile download for personal iPhone, iPad or Android devices, which allows passengers to save and recall preferences for subsequent flights.

The Gulfstream-designed Cabin View lets passengers track flight progress, displays points of interest and provides passenger briefings.

For communication needs, the G650ER is equipped with two multichannel satellite communications systems and a wireless local



network that provides onboard printing. For the fastest Web and email use, the G650ER can be equipped with optional Broadband Multilink (BBML) high-speed data system.

#### THE G650ER COCKPIT FLIGHT CONTROL AT ITS BEST

The technical sophistication of the Gulfstream G650ER improves every aspect of cockpit capabilities. A fly-by-wire flight system helps the G650ER achieve its unprecedented range. The G650ER's onboard computers work with the pilot or on full automatic to monitor a flight and provide small, measured adjustments that create smoother flights and improve passenger comfort.

With the help of the PlaneView II cockpit, information from the Flight Management

System (FMS) and the primary flight display are presented on multiple large format screens that give pilots the ability to select and organize how they want flight information displayed. Two side-mounted Gulfstream-designed Cursor Control Devices (CCDs) integrate with PlaneView II to allow pilots to select and scroll where and how they want to see airways, airports, radar weather and other data displayed.

The G650ER's advanced cockpit provides the most critical information in easy-to-read formats, which help increase situational awareness and pilot response.

#### **Seeing Into The Future**

State-of-the-art vision systems also help pilots see more and respond faster to changing flight conditions. With the Enhanced Vision System (EVS) II, a nose-mounted infrared camera allows pilots to see more than the human eye can. Detailed images of airports and surrounding terrain are enhanced at night and in low-visibility conditions. EVS images can be routed to a Head-Up Display (HUD) that feeds data onto a transparent screen in the pilot's forward field of vision.

Gulfstream also was a technology leader in creating Synthetic Vision-Primary Flight Display. The advanced monitoring system blends three-dimensional color images of terrain, obstacles and runways with instrument readings on the pilot's display unit, a combination that creates a more easily visualized landing approach for pilots.



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We have meticulously studied the needs of the customer and hence market demand for a considerable period of time before inducting the services.

Kartikeya, Editor, Aviation Update Interacted with Mr.Senthil Raja Head of commercial for Trujet Airline regarding UDAN initiative Mr.Senthil Raja is an engineering graduate from Anna University. He has got over a decade experience in Aviation in commercial aspects of airline including Network Planning, Revenue Management, Sales and Marketing and Customer Service. He is now head of commercial for Trujet Airline based out of Hyderabad

#### AU - Q: How has been the progress for the airline over the past two plus years and in the UDAN initiative of the Government?

We have commenced our operation in July 2015 and took several strides to connect to the hinterland of the country whilst having a keen eye on price and customer service. We have progressed in terms of expanding our services to underserved market like Nanded, Cuddapah and Vidya Nagar by participating in the UDAN scheme. Since the start of the operation, we have progressively improved upon the passenger yield and hence RASK.

#### AU - Q: What are your plans going forward when it comes to fleet expansion and connecting more cities?

We are currently operating with three ATR72-500 and one ATR72-600 and are in the process inducting four more

Aircraft very soon. We are currently operating to thirteen destination including Mumbai in a Hub and Spoke model from Hyderabad. With the new Aircraft joining the fleet, we will operate to eighteen destinations in south and western India in this year...Recently a brand new ATR 72-600 had joined our fleet thus taking our fleet size to five.

#### AU - Q: I understand you are close to hitting one million mark in a market which has seen a number of regional carriers collapse. Can you explain how this was possible?

We could achieve this milestone with the dedicated efforts of all 500+ employees in the organization. We all stood firm in our mission to provide connectivity to the hinterland of the country with most affordable fare and best customer service possible which made us realise this dream.

#### AU - Q: Does the Udan scheme work out financially for airliners?

UDAN scheme has monopolised the routes for the airlines for the period of three years. This gives an extended lead time to realise the investment and efforts the airline has made on the Sales & Marketing and other operational activity thus financially favouring the airlines.

#### AU - Q: The Government is seeking to tweak norms in Udan II, what are your views. How do you see yourself in this round?

Several new entrants have participated in the second round of the scheme which is very welcome for the growth of the untapped Indian Aviation Market. We have won bid to operate 20 routes with full VGF support in UDAN II..

#### AU - Q: How many city pairs do you plan to add from the 13 now? What about pilots and aircraft growth?

We are planning to add five more city pair in this year. Our Pilot induction programme is very comprehensive and will augment the pilot strength to cater to the increase in fleet size.

## AU - Q: In a market which has seen a number of regional carriers collapsing, how did Trujet manage to stay afloat? Kindly explain in the industry context where many have failed starting from Modiluft/Damania in 1999, Deccan in 2003 and now other carriers?

We have meticulously studied the needs of the customer and hence market demand for a considerable period of time before inducting the services. Our Aircraft type, category of routes, kind of service etc. are all tuned to match this need and demand...

#### AU - Q: Anything else you would like to comment on the aviation sector potential and growth in the country.

Despite a raft of policy facilitations, domestic airlines are flying into two major headwinds – crippling infrastructure constraints at major airports, and an uptick in fuel prices hampering the growth of the sector to a larger extent. With the UDAN scheme, airlines are given an opportunity to explore alternate means but there is a huge challenge to cater to the increasing demand that exist in this sector.

## Singapore Airshow PREVIEW 2018

ingapore Airshow is Asia's Largest Aerospace and Defense event. It takes place in every two years and offers exclusive platform to aviation industry. High-level government and military delegations, leading industry players around the globe gather here to establish partnerships, seal deals, exchange ideas and solicit strategies to advance the interests of the global aerospace and defence sector.

This year Singapore Airshow 2018 is scheduled to be held from 6 - 11 February 2018 at The Changi Exhibition Centre (CEC),

Singapore.

It provides a unique opportunity for startup companies to explore scope in aviation sector with access to the aerospace and defence companies, major airlines and government agencies from all over the world.

The upcoming Singapore Airshow Going into its 6th edition, the focal point of Aviation Leadership Summit 2018 is to analyze impact of the key issues on commercial aviation.

The Singapore Airshow Aviation Leadership Summit brings together highlevel participants from government, regulators, and the private sector and airline operators to inscription an extensive span of receiving close review from environment liberalisation and security challenges to salient strategic trends the region faces.

#### **SUMMIT THEME**

#### **Reimagining Aviation's Future**

Demand for air travel, especially in the Asia Pacific region, is increasing at a great rate. New technology and business models are making aviation more accessible and opportune. Aviation is a supreme example of an increasingly interconnected techno-social system that requisite a strong interoperability of the technological infrastructure with a human and social constituent. However the future threat is Airspace congestion which is becoming more common. Many states are interfacing challenges for their infrastructure and regulatory systems to keep up with the momentum of escalation.

In the Singapore Airshow 2018, we seek the answers and solutions on How can we unlock the full value that aviation brings to enable economic growth, business opportunities and improve lives? What choices do we have to make today to create the right pathways for a more sustainable and brighter future for aviation?

What is the situation awareness? What steps shall be taken today to secure and brighten up the future? How can we opt the comprehensive efficacy of Air transportation which brings to empower business opportunities, economic growth and better lives?





The Singapore Airshow Aviation Leadership Summit is jointly organised by the Civil Aviation Authority of Singapore (CAAS), Experia Events, International Air Transport Association (IATA) and the Singapore Ministry of Transport (MOT).

#### Opening Addresses

Ministerial and Chief Executive Panel
Unlocking Aviation's Potential; What Do
We Need To Do?

Many countries are considering policies that can limit the growth of aviation, which is challenging for aviation sector. And at the same time, new technologies are emerging with the potential to disrupt strong incumbents. How should international aviation respond to such challenges? What needs to be defended and what ought to change? Will and how aviation industry will be able to deliver its full potential while facing such challenges?

#### Session 1

**Future Aircraft Technologies** 

This session with both Airbus and Boeing will look at the plans the aircraft manufacturers have for future aircraft technologies.

#### Session 2

#### The Airline Industry beyond LCCs

In this session the discussion will be on, what is the future of the airline industry beyond LCCs, and what is the next business model that will again disrupt the business structure of the airline industry?

#### Session 3

#### The Future Of UAVs

In this session the discussion will be on how should we manage and regulate UAVs without stymieing its potential?

#### **Asia Business Forum**

7 Feb 2018 (Wed), 10:30am - 12:30pm

The Singapore Airshow Asia Business Forum will examine the opportunities and challenges for MRO providers in Asia Pacific. The Asia Business Forum is held in partnership with ICF.

#### Aviation Cyber Security Business Forum

7 Feb 2018 (Wed), 2:00pm - 4:00pm

In this discussion forum, SAS invited prominent speakers from both academia and industries to share their experience and insights on the emerging risks and how we can test the resilience as well as prevent cyber-attacks on the aviation ecosystem. The Aviation Cyber Security Business Forum is held in partnership with the Singapore University of Technology and Design (SUTD).

#### The Autonomous Revolution: The Race is On

7 Feb 2018 (Wed), 2:30pm - 4:30pm

To discuss about autonomous revolution, Oliver Wyman and industry leaders will share their perspectives and specific experiences.

Emerging Technologies and Innovation Business Forum

8 February 2018, Thursday, 10:30am – 12:30pm

To review on Industry 4.0 with digitalization driving greater efficiency in the areas of data management and security, robotics, industrial internet of things and artificial intelligence, and its applicability in the various sectors of MRO/Manufacturing, Association of Aerospace Industries (Singapore) will do the discussion.

It is an amazing platform for aviation operators, researchers and practising aviation engineers to confer discuss and explore key developments and advancements in aerospace technology and engineering.

#### What's Next @ Singapore Airshow

This will be a grand event full of scops for start-ups.

It's a Launch-pad for start-ups to showcase their products to potential investors, partners, customers and to reconnoiter opportunities in the aviation, aerospace and defence sectors. Access to potential buyers, investors and partners from around the world including Top 100 aerospace and defence companies, major airlines and government agencies.

Start-ups will get exhibition kiosks, pitching sessions and B2B meetings,

networking events/opportunities, business forums and technology seminars.

This initiative will introduce new mindsets in aviation and innovative ideas to help the aviation industry to reach new heights.

It will be a golden chance to meet Corporates/Buyers such as Airbus, Changi Airport Group, ST Engineering, Pratt & Whitney, Thales, Israel Aerospace Industries and many more. Investors and Venture Funds looking to invest in disruptive technologies and businesses.

Public visitors to Singapore Airshow 2018 will contend with 30 min flying display segment this year as the time has been cut to half an hour from 40 min for each session twice a day.

The organizer perceives that this is to corroborate that fewer commercial flights are affected, because the air space needs to be closed during the flying display.

#### Great opportunity for visitors

Other highlights at the show which will run from Feb 6 to 11 - the last two days being public days - include an opportunity for visitors to fly on a Super Puma military helicopter.

Visitors can view the spectacular array of advanced avionics in fighter cockpits, tour the lavish cabins of luxury jets and get inside the holds of transport giants.

Key players in the business jet market like Bombardier, Embraer and Gulfstream will also showcase their aerodynamic flying machines.

The highlight for the display will be the Airbus A350-1000; The A350 XWB is the allnew member of Airbus' leading wide body family. Which will enter into commercial service later this year.

Black Eagles are coming back to Singapore again to amaze you with fantastic and thrilling performance. The team operates 8 indigenous supersonic trainer jet developed by the Republic of Korea.

Su-30MKM from the Royal Malaysian Air Force is also going to take a part. It is a highly sophisticated state-of-the-art flying machine that can defy all laws of aerodynamics one can ever perceive.

1,000 participating companies from 50 countries have confirmed their attendance at the Airshow. Singapore Airshow is the perfect place to demonstrate products and capabilities relevant to aviation to key customers, investors and buyers from the Asia Pacific region and around the world.





## Creator of the First Indian Aircraft

#### Capt Amol Shivaji Yadav

hrust Aircraft Private Limited is a unique venture promoted by a Self-Motivated Entrepreneur Capt. Amol Shivaji Yadav. Capt. Amol a Deputy Chief Pilot by profession, has been working on building indigenous aircraft for past 17 years.

At the age of 19 Capt. Amol flew to US in 1995 for the Commercial Pilot training. He underwent rigorous training and brainstorming sessions required for becoming a successful Pilot. This has developed a confidence in Capt. Amol that he himself can manufacture customized aircraft. He returned to India with lots of hopes and aspirations.

Destiny had some brighter plans for Capt. Amol which nobody knew. After returning to India, he utilized his training and knowledge to transform his ideal aircraft dream. Capt. Amol's father Mr Shivaji. S. Yadav stood like a lighthouse, when Capt. Amol told him about making an aircraft. His family and friends stood by him through the thick and thin.

In 1998 Capt. Amol started with an extraordinary dream. He wanted to convert the flight of an eagle into a reality. His ambition took wings and single handedly he made 2 seater aircraft. But the aircraft stayed grounded due to technical reasons.

This propelled Capt. Amol further. In 1999 he took care of all the technical details. By 2003 he completed his 2 Aircraft, but couldn't launch due to regulations. However, his passion for Aircraft did not allow him to stop. Finally in 2010 the conception of a new Aircraft TAC 300 took roots.

By 2016 a sleek 6 Seater came in to existence due to Capt. Amol's firm determination and perseverance. Working with Jet airways gave him the expertise regarding selection of high quality raw material, Aviation quality norms, Regulations and Avionics. The blessings and strong support of his family, friends and well-wishers inspired Capt. Amol to reach new heights. A full proof, technically sound, Six Seater aircraft boomed its way at the MAKE IN INDIA Exhibition as well as in the Aviation Show 2016 at Hyderabad. It got an overwhelming response.

Capt. Amol eagerly awaits for the clearance of all the registration and airworthiness norms. He is planning to set for the establishment of his first Indian Aircraft Manufacturing Company.

Thrust Aircraft Private Limited is the FIRST Company in India to propose manufacturing of Aircraft, Aeroplanes as a main goal of a company. Thrust Aircraft Private Limited have built a first ever MADE IN INDIA Aircraft which is an experimental type. Company has ensured that all the said norms in the DGCA policy and AAI directed sections / schedules have been followed while manufacturing this Aircraft.

#### **Product Specifications**

Product TAC\_003

Crew and passenger : 6(1 pilot and 5 passenger)

Length : 31 ft 3 in

Wingspan : 37 ft 1 in

Height : 10ft 8 in

Wing Area : 162 ft

Empty Weight : 1450 kg

Max. Take of Weight : 2010 kg

Power plant : 350 Hp Engine

192 knots Never exceed speed Maximum speed 185 knots Stall speed 66 knots 1800km Range Service Ceiling 13000ft Rate of Climb 1500 ft/min Wing Loading 27.31lb/ft<sup>2</sup> Safety Equipment **BRS Parachute** 

Endurance : 5 hrs

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#### Lufthansa Technik and Pepperl+Fuchs found start-up 3D.aero

The two German companies Lufthansa Technik AG of Hamburg and Pepperl+Fuchs GmbH of Mannheim have founded an equally owned joint venture called 3D.aero GmbH. The aim of this new company is to research, develop and sell innovative automation solutions for the aviation industry. Furthermore, it will work on solutions for the digitalization of workshops. Its headquarters are at the ZAL TechCenter in Hamburg-Finkenwerder, one of the largest and most modern aviation research centers in the world. This location will enable 3D.aero to network with other aviation companies.

Besides industrial workshop and factory automation solutions, 3D.aero will also offer the application of optical measuring devices, digital inspection and image processing applications and related consulting services. The company will operate as a modern start-up and have flat hierarchies, with the young team consisting mainly of Pepperl+Fuchs employees and graduates of the Institute for Aircraft Production Technology at Hamburg



University of Technology.

"We are delighted to have won Pepperl+Fuchs, a leading manufacturer of electronic components and sensors for factory and process automation, as a partner. This will enable us to keep pursuing our Industry 4.0 strategy and use this knowhow for our processes and products," says Bernhard Krueger-Sprengel, Senior Vice President Engine Services at Lufthansa Technik. While 3D.aero was founded as part of a concrete project at the Engine Services

division, it will however serve all Lufthansa Technik divisions as well as other companies in the aviation industry.

For Pepperl+Fuchs, this is another milestone in its expansion strategy. "Thanks to this joint venture, we are now able to apply our long-term expertise in industrial automation in the aviation industry as well. So we are especially looking forward to our close collaboration with Lufthansa Technik," says Dr. Gunther Kegel, CEO of Pepperl+Fuchs.

#### The CAAC grants airworthiness certification to SR Technics in Malaysia

R Technics, a world leading MRO service provider is pleased to announce that in late November, its Malaysia operations received the airworthiness certification from the Civil Aviation Authority of China. With the certification, SR Technics Malaysia will be able to certify components for customers on the Chinese market. Additionally, SR Technics Switzerland renewed the existing CAAC certification which allows us to continue to grant Chinese airworthiness certificates from our Swiss maintenance facilities.



The CAAC certification is an important milestone for SR Technics, as the company is expanding its component services in China and the wider Asia Pacific region. This certification will enable SR Technics Malaysia to support both existing and new Chinese-based customers in component repair, and more broadly, it evidences the growth and development of the company's facilities and services. The Malaysia location will now be able to assist carriers, MROs and third-party customers that require the certification with component

repairs on their Airbus and Boeing aircrafts in China, increasing SR Technics' presence and capabilities in the Asia Pacific region.

"We are very excited about the new certification for our component repair facility in Malaysia, which will strengthen our position on the Asia Pacific market," says Thomas Kennedy, Vice President Component Maintenance and Managing Director for SR Technics in Malaysia. "I would like to congratulate our team on this landmark achievement for SR Technics in Malaysia."

Opened in 2014, the SR Technics Malaysia facility boasts a component maintenance service center for the testing, repair, overhaul and modification of aircraft and engine components, serving as the regional customer service center for the company's Asia Pacific-based component services customers.



## GECAS Appoints Declan Kelly Chief Commercial Officer

eclan Kelly has been named Chief Commercial Officer for GECAS. In this newly created role, Declan will lead all originations activities for GECAS' fixed wing aircraft and is responsible for the commercial strategy, building synergy and share practices between GECAS' regions.

Declan brings 30 years' experience in the aviation industry, he brings deep domain expertise and proven leadership skills to the role which will report to Alec Burger, President of GE Capital and President and CEO of GECAS.

GECAS' Chief Commercial Officer will be based in Shannon Ireland. Until a replacement is named for his prior role, Kelly will also continue to serve as Executive Vice President, US, Latin America, Caribbean.

#### Lufthansa Technik extends Boeing 737 MAX capabilities

onnectivity modification program starts in Budapest in mid-2018, from mid-2018, Lufthansa Technik AG will start connectivity modifications on several Boeing 737 MAX aircraft of an undisclosed airline customer at its overhaul facility Lufthansa Technik Budapest. The five-day modification includes the installation of a broadband antenna on the aircraft's external structure, together with cabling, hardware and software installation in the aircraft cabin.

Following the modification program, full base maintenance capability will be built up for Boeing 737 MAX at Lufthansa Technik Budapest in the next months in a first step. Capability extension at further locations of the Lufthansa Technik network will follow.



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#### Rolls-Royce further develops its CareNetwork capability as it signs new agreement with StandardAero

Rolls-Royce is continuing to develop its CareNetwork capability to service existing fleets as well as ensuring it is ready to meet the future ramp-up in engine service requirements. As part of this process, Rolls-Royce has signed an agreement with StandardAero to provide maintenance service for RB211-535E4 engines from its base in San Antonio, Texas. The first engine inductions will take place in early 2019.

Around 1,000 RB211-535E4 engines are in service, powering Boeing 757 aircraft, with half of the fleet in service in North America. RB211-535E4 engines are anticipated to remain in commercial airline service until the year 2040. This marks a further milestone in Rolls-Royce's strategy to develop a competitive, capable and flexible network to meet the changing needs of customers across the lifecycle of engines and to support the growing Trent engine fleet. Recent additions to the CareNetwork have included Air France Industries KLM Engineering Maintenance, Mubadala Development Company, and Delta TechOps.

Tom Palmer, Rolls-Royce, Senior Vice President – Services, Civil Aerospace, said: "We are continuing to evolve our CareNetwork to make it ever more competitive, capable, and flexible and this

agreement strengthens the level of service support we can offer our customers. I know that, in StandardAero, we have a service provider that will be able to meet the needs of our RB211-535E4 customers both now and in the future."

Peter Turner, President of StandardAero's Airlines and Fleets division, said: "The RB211-535E4 will be the highest thrust engine in our commercial MRO portfolio. Winning this large, long-term commercial contract is a true demonstration of our strong customer relationships, trusted service partnerships and proven abilities to successfully stand up engine MRO programs."





#### Remy St-Martin Appointed Chief Operating Officer, Dassault Aircraft Services

Remy St-Martin has been promoted to Senior Vice President/ Chief Operating Officer of Dassault Aircraft Services (DAS), Dassault's company-owned service center network for the Americas.DAS is a wholly owned Dassault affiliate headquartered in Wilmington, DE and specialized in maintenance, interior modifications, paintwork and upgrades. St-Martin most recently served as Vice President and General Manager of DAS Little Rock. He will report to Geoff Chick, Senior Vice President, Customer service at Dassault Falcon Jet.

"Remy's extensive customer service background makes him the ideal leader to further improve the efficiency, service quality and close customer relationship that characterize Dassault factory owned service center operations," said Chick. "His easy going manner, can-do attitude and longtime Falcon expertise will be definite assets in his new role."

St-Martin will be responsible for leading the DAS management team, defining strategic, operational and financial objectives to enhance the Falcon customer experience and meet new company goals. St-Martin joined Dassault Falcon Jet in 2013 as Senior Director, Customer Experience before moving on to join the DAS organization. Prior to that, the aviation veteran served in several positions at Discovery Air Technical Services in Canada, most recently as President. He has also held a variety of customer service responsibilities with other business aviation companies and served with the Canadian Armed Forces. St-Martin graduated from the Royal Military College in Kingston, Ontario with a degree in Mechanical Engineering.

## India launches deploys Cartosat, 30 satellites in Earth's orbit

India has deployed a remote sensing Cartosat and 30 other satellites, including 28 from six countries, into the Earth's orbit after a copybook launch of a polar rocket from its spaceport here in Andhra Pradesh.

"The Polar Satellite Launch Vehicle (PSLV-C40) deployed India's 710-kg Cartosat and 10-kg nano satellite and 100-kg microsat along with 28 foreign satellites into the Earth's orbit after a perfect lift-off from the launch pad," said outgoing Indian Space Research Organisation (ISRO) Chairman A.S. Kiran Kumar Jan 12 at the mission control facility, about 80 km northeast of Chennai.

The four-stage rocket had deployed the Cartosat-2 in the sun synchronous orbit about 17 minutes 33 seconds after its lift-off from the Satish Dhawan Space Centre, Sriharikota High Altitude Range (SDSC-SHAR). The Cartosat-2 was injected into its 505-km sun synchronous orbit. It has a five-year life span.

The 100-kg micro satellite, which was India's 100th satellite, was slotted into its sun synchronous orbit, at an altitude of 359



km above the Earth. The mission control had fired the engines to restart the fourth stage for lowering the rocket to deploy the micro satellite in its intended orbit.

The first space mission in 2018 on board the PSLV-C40 comes four months after a similar rocket failed to deliver the country's eighth navigation satellite in the earth's lower orbit on August 31, 2017.

"We took rigorous measures to ensure that the heat shield issue that prevented the last mission (PSLV-C39) from deploying the satellites would not be repeated," Kumar asserted. The rocket carried a total of 31 satellites, among which three were Indian: Cartosat-2, nano satellite and micro satellite. The performance of the deployed Cartosat-2

was satisfactory as monitored by the mission control facility, Kumar added.

As an observational satellite, Cartosat will beam high-quality images for cartographic, urban and rural applications, coastal land use and regulation and utility management like road network monitoring.

"The performance of the launch vehicle was very impressive and followed its intended path perfectly," said the newly appointed ISRO chief K. Sivan. "This mission proves that PSLV is a robust and reliable vehicle," added the Director of SDSC-SHAR, P. Kunhikrishnan.

Among the 28 international copassenger satellites that were deployed into multiple orbits, 19 belong to the US, five to South Korea and one each to Canada, France, the UK and Finland. The satellites would be placed in their intended different orbits finally after manoeuvres from the space agency's Master Control Facility (MCF) at Hassan in Karnataka, about 180 km from Bengaluru.

The foreign satellites are commercial launches of the space agency's arm Antrix Corp. The spaceport has several consecutive launches lined up for the coming months, Kumar said.

The next mission of Geosynchronous Satellite Launch Vehicle (GSLV) Mark II was being assembled and is scheduled to be launched next month, Kumar added.

## Kirsten Hammerich is RUAG's new media spokesperson

irsten Hammerich has taken over as Media Relations Manager with effect from 1 January 2018 and is now responsible for the Group's relations with the media in Switzerland. She reports to Alexandre Schmidt, Vice President Owner Relations, who is now also responsible for RUAG's external communications in Switzerland.

Kirsten, age 50, worked from 2003 onwards in various communications roles for the Swiss Armed Forces, most recently as Head of Communications for the Land Forces. Having started out as a journalist, Kirsten Hammerich has spent the past years developing an extensive network and building up a rich store of experience as a media spokesperson and more recently as Head of Communications for the Army.

Before starting to work for the Swiss Armed Forces, Kirsten Hammerich was a news reporter for SWISS TXT Schweizerische Teletext AG, where she led the news service and was deputy chief editor for Germanspeaking Switzerland. Outside work, she volunteers in her local community, serving as mayor of Diemerswil.

Her becoming Media Relations Manager alongside Clemens Gähwiler, External Communication



Manager, and Daniel Makanec, Public Affairs Manager, completes RUAG's external communications team for Switzerland. Alexandre Schmidt, Vice President Owner Relations, is already responsible for all relations with the Swiss government, RUAG's sole shareholder, and with the federal authorities, and now also has overall responsibility for RUAG's external communications in Switzerland. RUAG is delighted to welcome Kirsten Hammerich and wishes her a good start in her new role.

## BAE Systems introduces next evolution of Infantry Fighting Vehicle with new CV90 MkIV



This fifth generation of the company's combat-proven IFV family represents the next step for the CV90 concept.

The new MkIV offers substantial capability upgrades, including increased drive train capabilities and active damping technology to improve battlefield speeds and handling. The new vehicle also features the latest NATO-standard Electronic Architecture to meet customer demands for sensor integration and the implementation of autonomous systems.

BAE Systems intends to offer the CV90 MkIV to the Czech Republic in the ongoing armoured vehicle competition to replace the Czech Army's legacy fleet of BMP-II IFVs.

"We are proud and excited to present the next step in the development of CV90," said Tommy Gustafsson-Rask, vice president and general manager for BAE Systems' Hägglunds business. "The MkIV will now be available to both current and future users of the CV90, who can take full advantage of this combat-proven vehicle's ongoing development and benefit from these new capabilities. This approach provides the leading combination of a proven low-risk solution for the most modern IFV for future growth."

The CV90 IFV is a modern, adaptable, and combat-proven vehicle with 1,280 vehicles in 15 variants sold

to seven nations, including four NATO allies. The most recent generation of the CV90, under delivery for the Norwegian Army, is one of the most modern IFVs in production in the world.

The CV90 MkIV includes a new Scania engine with up to 1,000 horsepower and the latest upgraded X300 heavy-duty transmission. The Gross Vehicle Weight Rating is increased from 35 tonnes to 37 tonnes, meaning users will benefit from two tonnes of extra payload without a decrease in vehicle agility, with the same level of protection. This gives any users an unrivalled amount of potential for future growth.

The MkIV capability upgrades also enable the full implementation of BAE Systems' iFighting™ concept. iFighting™ — or intelligent fighting — is the company's vision for the future complex battlefield. iFighting™ supports the vehicle's crew with significantly enhanced situational awareness, aiding the decision making process. This safeguards the vigilance and the endurance of the crew, while ensuring peak performance for the whole system. iFighting™ improved ergonomics, more advanced autonomous support, augmented reality, and the possibility of remote operation.

The CV90 is currently in use in Denmark, Estonia, Finland, Norway, Sweden, Switzerland, and The Netherlands.



#### Indian Defence Minister takes to Skies in an IAF Su-30 MKI

ndian Defence Minister Nirmala Sitharaman, on her visit to Air Force Station Jodhpur, took to the skies in the formidable Su-30 MKI fighter aircraft of 31 Squadron. In her 45 minutes of sortie, she was demonstrated some of the unique characteristics and strengths of this mighty twin engine Air Superiority Fighter (ASF). She is the first woman Defence Minister of India to fly a sortie in an IAF Su-30 MKI fighter aircraft. To gauge the operational capability and preparedness of the defence forces, the Defence Minister has been visiting various establishments of the Armed Forces. These visits go a long way in enhancing the motivation of the defence personnel as they get an opportunity to personally interact with the Defence Minister herself.

After her sortie on the multirole ASF, she addressed and interacted with the Air Warriors of Air Force Station, Jodhpur and congratulated them on their professionalism, high state of morale and motivation. During the visit, she was also briefed on employment of Air Power in the defence of our country.

Owing to its versatile capabilities, Su-30 MKI forms an integral and the most potent component of our nation's Air Power. Recently, 'BrahMos' Supersonic Air Launched Cruise Missile and 'Astra' Beyond Visual Range Air-to-Air Missile, was integrated and successfully fired from this platform. With these advancements, the reach with air-to-air refueling and standoff performance, Su-30 MKI is a truly potent platform and is bolstering IAF's strategic capabilities.

## India Test-fires Agni-V Long Range Missile Successfully

The indigenously-developed nuclear-capable Agni V can reach 5000 km, and comes in the category of Inter Continental Ballistic Missiles (ICBMs).

It is the most advanced system developed under the country's Integrated Guided Missile Development Programme that started in the 1960s. The missile was first tested in 2012. The latest test was conducted from the Bay of Bengal off the Odisha coast, and the missile landed far away near Australian waters and was monitored throughout its fight by sensors on board ships and satellites.

India joins the US, UK, Russia, France and China which have this capability.



#### Airbus Delivers Latest Standard Eurofighter to Spanish Air Force

The aircraft were manufactured at the Getafe Final Assembly Line in the P1Eb FW (Phase 1 Enhanced Further Work) configuration which marks a key step in the overall Eurofighter evolution plan. This same configuration is being retrofitted to in-service aircraft by other Eurofighter nations. It provides increased integration of a variety of air-to-surface weapons and enhanced targeting among other improvements.

Spanish procurement agency DGAM took delivery of the aircraft on 22 December and they were subsequently ferried to Albacete air force base to enter service. The remaining six of the 73 aircraft currently contracted by Spain will be delivered to the same P1Eb FW standard during 2018 and 2019.

Airbus Operating Officer, Military Aircraft, Alberto Gutierrez said: "The smooth introduction of these enhanced features is a vital element of Eurofighter's evolution. It is a big tribute to the Airbus and Spanish customer teams that they achieved this on-time through effective collaboration and clearly demonstrates the rich manufacturing capability here at Getafe." DGAM Head of Aeronautical Systems Gen Léon Antonio Machés said: "The entry into service of these aircraft is the outcome of strong collaborative activity between our personnel and those of Airbus. It is an excellent illustration of the technical expertise that will support many more years of Eurofighter industrial activity in Spain."



## Thales Alenia Space to provide the X-band Transmitter for South Korea's Earth observation mission KOMPSAT-7

Thales Alenia Space has signed a new contract with the Korea Aerospace Research Institute, KARI, to deliver the X-band communications system for the KOMPSAT-7 mission (Korea Multi-Purpose Satellite 7), with a target launch in 2021 and a lifetime of five years.

KOMPSAT-7 is an Earth observation mission in Low Earth Orbit (LEO) developed by KARI to provide high resolution satellite images to satisfy South Korea's national needs. It will embark a high resolution optical instrument, AEISS-HR (Advanced Earth Imaging Sensor System – High Resolution) featuring world-class 0.3 meter resolution. The X-band system will be in charge of transmitting the high resolution images to the ground station through a high speed data downlink.

"Thales Alenia Space is honoured to merit the confidence of KARI on our experience and reliability to deliver state-of-the-art satellite communication payloads and equipment," said Eduardo Bellido, CEO of Thales Alenia Space in Spain. "Our contribution to the KOMPSAT-7 Earth observation program is the latest milestone in a long-standing fruitful collaboration with KARI, in multiple programs such as COMS-1, KOMPSAT-3A, GEO-KOMPSAT-2, KOMPSAT-6, CAS500 and KPLO," he added.

#### France's Armée de l'Air Welcomes First C-130J Super Hercules

Rrance's minister of the Armed Forces, officially welcomed the country's first C-130J Super Hercules aircraft to the Armée de l'Air's 62st Transport Wing with a ceremony at Orléans-Bricy Air Base. Government officials from France and the United States also attended the ceremony, along with representatives from Lockheed Martin.

France will receive a total of four Super Hercules aircraft — two C-130J-30 combat delivery airlifters and two KC-130J aerial refuelers — through a Foreign Military Sale with the U.S. government, with deliveries taking place through 2019. The first of these aircraft (a C-130J-30 airlifter) was formally delivered to France in December 2017 at the Lockheed Martin



facility in Marietta, Georgia, in the United States.

France first acquired C-130Hs in 1987 and its new C-130Js will be operated with its existing Hercules fleet.

"As a long-time Hercules operator, France has continuously demonstrated to the world the unmatched qualities and versatility found only in a C-130," said George Shultz, vice president and general manager, Air Mobility & Maritime Missions at Lockheed Martin. "France's new Super Hercules fleet delivers increased power,

speed and capabilities to ensure that Armée de l'Air crews continue to meet — and exceed — mission requirements for decades to come."

France is the 17th country to choose the C-130J for its airlift needs. The C-130J Super Hercules is the most advanced tactical airlifter in operation today, offering superior performance and enhanced capabilities with the range and versatility for every theater of operations and evolving requirements.

## Lockheed Martin Appoints Key Communications Leaders

ockheed Martin appointed Bill Phelps as vice president, External Communications, and Adam Sohn as vice president, Lockheed Martin Space Communications. Both report to Jennifer Whitlow, senior vice president, Lockheed Martin Communications.

Phelps succeeds Nettie Johnson who will retire from Lockheed Martin January 31, and Sohn succeeds Andrea Greenan, who was recently named vice president, Internal Communications. Phelps has more than 20 years of experience in corporate communications, public relations and journalism. In his new role, he will lead the corporation's media relations, marketing communications, social media and visual communications functions. He joined Lockheed Martin in 2016 as director, Worldwide Media Relations, serving as the primary spokesperson for the corporation and leading the team responsible for external media engagements.

Prior to Lockheed Martin, he was director of Corporate Communications for Altria, which owns some of the nation's largest tobacco companies, including Philip Morris USA. There, he led the media relations, online, internal communications and corporate marketing teams, supporting issues related to the company and its products, including Marlboro.

He was also an account supervisor at Siddall, an advertising and public relations firm, and served several years as a television news producer at the NBC affiliate in Richmond, Virginia. Phelps holds a bachelor's degree in Communications from the University of Richmond and a master's degree in Business Administration from the Darden School of Business at the University of Virginia. Sohn brings more than 20 years of demonstrated success as a communications leader in technology and politics to his new role. As vice president, Space Communications, he is responsible for integrated communications in support of the Lockheed Martin Space business, including employee engagement, community relations, marketing, social media and media relations.

Previously, he was director of Strategic Communications at Amazon's devices and services business, where he led a team responsible for global communications strategy, thought leadership and issues management for products including Echo and Alexa, Fire TV, Fire Tablets and Kindle. Prior to joining Amazon, Sohn held a number of communications leadership roles at Microsoft where he was responsible for corporate brand reputation management, as well as, the launch and sustainment of key products such as the Bing search service and Windows.

## So you think you can fly

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Interview City	Position	Date	Time	Venue	Aircraft Type
Delhi	Cabin Crew	31-Jan-18	10AM - 3PM	Essex Farms, 4 Aurobindo Marg	A320
Mumbai	Cabin Crew	1-Feb-18	11AM - 4PM	Hotel: Avion, Domestic Airport, Nehru Road, Vile Parle (East), Mumbai	A320
Shillong	Cabin Crew	1-Feb-18	8AM - 11AM	Hotel: Polo Towers, Polo Grounds	ATR
Siliguri	Cabin Crew	2-Feb-18	9AM - 2PM	Hotel: Royal Sarovar Portico, 3rd Mile Sevoke Road	A320
Lucknow	Cabin Crew	10-Feb-18	9AM - 2PM	Hotel: Vivanta by Taj. Gomti Nagar, Vipin Khand	ATR
Delhi	Cabin Crew	10-Feb-18	10AM - 3PM	Essex Farms Pvt. Ltd 4, Aurobindo Marg	A320
Dehradun	Cabin Crew	17-Feb-18	10AM - 2PM	Hotel: Lemon Tree, Pacific Mall, Jakhan, Rajpur Road	ATR
Delhi	Cabin Crew	18-Feb-18	10AM - 3PM	Hotel: Hilton Garden Inn Saket,New Delhi	A320
Chandigarh	Cabin Crew	18-Feb-18	10AM - 3PM	Hotel: Lemon Tree Hotel MW Area,Industrial Area Phase-I,	A320
Amritsar	Cabin Crew	24-Feb-18	9AM - 1PM	Hotel: Country Inn Hotels and Resorts, 33–A Solitaire mall,	A320
Bangalore	Cabin Crew	25-Feb-18	10AM - 3PM	Hotel: Iris, The business hotel and Spa.70, Brigade Road	A320
Jaipur	Cabin Crew	25-Feb-18	10AM - 3PM	Hotel: Royal Orchid Tonk Road, Durgapura	A320

Please Note: These recruitment drives are being organized and handled by authorized recruitment partners of IndiGo. Neither IndiGo nor its recruitment partners indulge in the practice of collecting any processing or enrolment fees from candidates.



#### **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
Delhi	Feb 2, 2018	1000 hrs to 1400 hrs	Constitution Club of India, Rafi Marg, New Delhi.
Vadodara	Feb 2, 2018	1100 hrs to 1500 hrs	Hotel Suba Elite, Fatehgunj Road, Vadodara.
Mumbai	Feb 3, 2018	1000 hrs to 1400 hrs	Kaledonia (HDIL Building), 4th Floor, Off Western Express Highway, Sahar Road, Andheri East, Near Andheri East Railway Station, Mumbai.
Pune	Feb 5, 2018	1000 hrs to 1400 hrs	Novotel, Pune Nagar Road, Weikfield IT Infopark, Survey No. 30/3, Ramwadi, Viman Nagar Pune.
Nagpur	Feb 6, 2018	1100 hrs to 1400 hrs	The Legend Inn, 15 Modern Society, Vardha Road,near Sonegaon Airport, Nagpur.
Chandigarh	Feb 7, 2018	0900 hrs to 1300 hrs	The Golden Plaza Hotel, Paras Downtown Square Zirakpur, Chandigarh.
Aurangabad	Feb 7, 2018	0900 hrs to 1300 hrs	The Salt Hotel,MGM Sports Complex, MGM Campus N-6, CIDCO, Behind MGM Hospital, Aurangabad.
Jaipur	Feb 8, 2018	0900 hrs to 1300 hrs	Clarion Bella Casa, 1 Ashram Marg, Tonk Road, Jaipur.
Kolkata	Feb 9, 2018	1000 hrs to 1400 hrs	The Circle Club, Crossing of VIP Road, Rajarhat, New Town Express Way, Opposite Charnock Hospital, Kolkata Airport, Kolkata.
Bengaluru	Feb 10, 2018	1000 hrs to 1400 hrs	RG ROYAL Hotel - No. 19/1, Old 77, Near ISKCON Temple, Behind Ravindu Toyota, Mahalakshmi Layout, Bengaluru.
Kochi	Feb 12, 2018	0900 hrs to 1200 hrs	Flora Airport Hotel, Opp. International Terminal Kochi Airport, Nayathodu P. O. Kochi.
Guwahati	Feb 15, 2018	1000 hrs to 1400 hrs	Fizair Aviation Academy Hotel Pragati Manor, GS Road, Christianbasti, Near to News Live office, Guwahati.
Delhi	Feb 20, 2018	1000 hrs to 1400 hrs	Constitution Club of India, Rafi Marg, New Delhi.
Mumbai	Feb 24, 2018	1000 hrs to 1400 hrs	Kaledonia (HDIL Building), 4th Floor, Off Western Express Highway, Sahar Road, Andheri East, Near Andheri East Railway Station, Mumbai.

Experienced Cabin Crew and those unable to attend can apply at jetairways.com/careers.

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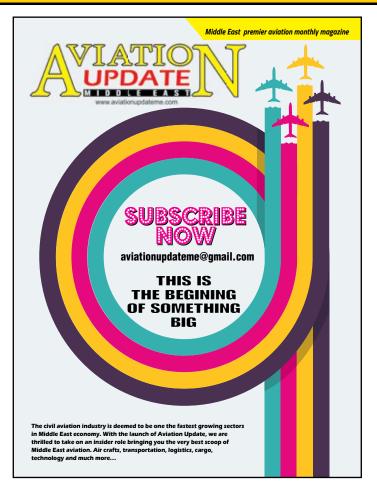
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