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2012**

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Jayant Baranwal

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IATA demands major government support to aviation sector



BY R. CHANDRAKANTH

With the Indian aviation sector going through difficult times, Tony Tyler, the Director General and CEO of International Air Transport Association (IATA) today made a fervent appeal to the Indian government to rework its aviation policies as to keep the industry afloat.

Painting a gloomy scenario at the India Aviation 2012 summit in Hyderabad, Tyler said "if Delhi has to become a global aviation hub, it cannot happen with the present policies. It is one of the costliest airports in the world."

"The state of today's Indian aviation industry is the result of a number of factors – not least of which was an aggressive expansion by the country's airlines that took effect just as the world encountered a pair of massive economic shocks in succession. By that of course, I am referring to the skyrocketing oil price in 2008 that shifted almost overnight into a global financial crisis."

FOUR PILLARS. Tyler said an agenda to build competitiveness in Indian aviation rests on four pillars – taxes; infrastructure; costs and; investment policies.

"Let me start with taxes. Yesterday the Minister of Civil Aviation (Ajit Singh) mentioned the need to make air travel more accessible. One way of achieving that is

by taxing it less. Our concern over the application of the 10.3 per cent Service Tax to air tickets as well as to services that airlines purchase, such as landing and air navigation fees, is well known. There is the legal argument that it contravenes the provisions of the Chicago Convention. While the Ministry of Civil Aviation is quite familiar with ICAO principles, the Ministry of Finance continues to ignore international obligation. Removing the burden of the Service Tax would improve the competitiveness of Indian aviation, boost access to both domestic and international connectivity and drive economic growth."

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FUEL TAX DESTROYING COMPETITIVENESS. Even more damaging however, is the tax on fuel. All fuel is subject to an 8.24 per cent excise duty. Then domestic flights face state level fuel taxes up to 30 per cent. The result is destroying the competitiveness of Indian airlines. Globally, fuel accounts for about 32 per cent of an airline's cost base. For Indian carriers it is 45 per cent. MOCA has understood this and is lobbying to reduce the burden."

"MOCA is seeking to address the issue of high jet fuel prices by allowing airlines to directly import fuel. So far the impact has been limited because we believe the Competition Commission of India and the Petroleum Ministry have not yet mandated access to off-airport transport and storage infrastructure."

Tyler said, "The high cost of jet fuel has been hijacking the competitiveness of the Indian air transport industry for over a decade – with every flight that has taken off or landed on the sub-continent. We appreciate the effort to start to address the issue. It is now clearly recognized by all that fuel taxes are sucking the life blood from the Indian aviation sector. The industry is now in crisis and we need a coordinated effort among all Ministries – at national and state levels – to restore competitiveness."

"The mission for such a coordinated effort is clear. Taxes – particularly state taxes – should be removed and a National Access Regime must be established for jet fuel. Such a regime should allow users, including airlines, access to critical fuel infrastructure at reasonable prices."

BUILDING INFRASTRUCTURE. Tyler remarked "When India wants to build world class infrastructure, it clearly can succeed. Why then is Navi Mumbai so long delayed? Its two runways and potential to handle up to 60 million passengers per year is badly needed to serve India's economic capital. The first phase was meant to open in 2014 but construction has not yet begun. Land acquisition is not even complete."

"Even with recent expansion, the facilities at Mumbai are bursting at the seams. Navi Mumbai is not an option. It is critical. And the only way that I can see it being completed without further delay is if the government – all Ministries – coordinate their efforts to facilitate success – as they did for Delhi's new terminal."

"Industry is a willing partner in developing critical infrastructure. In 2008, we successfully worked with the Airports Authority of India (AAI) to fund Data Link services in the Bay of Bengal with a \$4 per flight fee over four years. The data link was successfully installed, and is improving airline operations. There is surplus in the account. Airlines want to use it in a Project India initiative that will develop strategies to reduce delays and improve the efficiency and robustness of air traffic management. Where we see value and a clear return on investment, airlines are willing partners in developing infrastructure capabilities."

DELHI MOST EXPENSIVE AIRPORT. Talking about Delhi airport, Tyler mentioned that "Overall airport charges at Delhi, using market rates, are aligned with those in Seoul, Auckland or Madrid. But if you convert this to a purchasing power parity rate, the current rate is about 50 per cent or higher than charges at major hubs such as Heathrow, Paris or Tokyo. With that, cost-efficiency gains would be expected."

"Instead, Delhi International Airport Limited (DIAL) proposed a 740 per cent increase that would make it the world's most expensive airport. The Airport Economic Regulatory Authority or AERA, knocked that back to 340 per cent to be implemented in two stages. If that materializes, Delhi will still become the world's most expensive airport. India's aviation industry is sick. Adding a \$300 million headache to it will put it in intensive care from a cost perspective. And it also is estimated that a 5-7 per cent decrease in demand will result. Such an increase in charges would certainly fit the Ministry of Tourism's "Incredible India" description, but it will come with a fall in tourist arrivals and further damage to local and international connectivity."

"Given the broad economic implications of such an increase, it is important that the government takes immediate action. First 340 per cent is unacceptable. It would be a shock to the system that would ripple throughout the economy."

The Ministry cannot stand by and let this happen. It must intervene with a broader context. This should take into consideration the long-term development of Indian aviation at its hubs. And if need be, the concession contracts, which at Delhi channel 46 per cent of revenues to AAI, need to be rethought with the aim of offsetting aeronautical charges."

Tyler said there was need for "urgent review at the structure of charging for international versus domestic. We all use the same airport and runway. There is no justification for differential charges or charges based on distance flown. In fact, like the application of the Service Tax, it contravenes ICAO rules. Finally, there should also be a review of the allocation of aeronautical and non-aeronautical assets to be more in line with other major international airports."

EXCLUDING FOREIGN AIRLINES IN FDI NOT GOOD. The IATA DG and CEO said that the 49 per cent cap on foreign investment in airlines aligns with the general practice globally. But the complete exclusion of foreign airlines from investing in Indian carriers set by the Ministry of Commerce is unique to India. Given that foreign airlines could invest to own 100 per cent mass rapid transit systems, ports and harbors, hotels and tourism, inland water and ocean transport, toll roads or tunnels in India."

Tyler added the MOCA has proposed that the restriction be lifted so that foreign airlines could own up to 49 per cent of an Indian domestic carrier. "What is the public policy imperative of denying this possibility to Indian carriers? I hope that it will be given due and positive consideration by the Indian cabinet."

Allowing foreign airlines to invest in Indian aviation is not a panacea, unless the other three pillars – costs, taxes and infrastructure – are addressed."

"The problems facing the Indian aviation sector are severe and beyond the control of airlines. Solving them will require a government-wide team effort. MOCA can and has taken steps in the right direction, but without the support of the Ministries of Tourism, Finance, Environment and Petroleum and the Competition Commission, the major changes that are needed cannot take place. Many committees and groups of government officials have looked at remedies in the past. Another committee is not the answer."

I would suggest that a common vision – expressed in a National Aviation Policy strongly linked to an implementation plan – could be a way forward." •

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FALCON 7X – AN EMBODIMENT OF PASSION AND PERFORMANCE

Falcon 7X – A quantum leap into the future

BY B.K. PANDEY ONBOARD 7X

On the opening day of India Aviation 2012, Dassault Aviation presented the latest large-cabin, long-range business jet from its stables – the Falcon 7X. The short 45-minute flight was a joyful and pleasing experience onboard the luxurious business jet as it got airborne after an incredibly short takeoff roll and climbed rather steeply away into the partially cloudy sky over Hyderabad with all seats occupied. With elegantly designed and plush interiors, a modern cockpit with avionics from Honeywell, the Falcon 7X provides the most satisfying experience for both the passengers and crew alike.


Dassault Falcon commands a respectable share of the Indian market for executive jets and continues to consolidate its position as the benefits of business aviation become recognised by an increasing number of Indian companies and private owners. A total of 20 Falcons are currently operating from airports in Delhi, Mumbai, Bangalore and Hyderabad. Several more orders are in the pipeline. Dassault is the Indian market leader for large cabin long range aircraft. Falcon business jets are eminently suitable for the varied operating conditions in India and the region where aircraft are frequently called upon to operate at airfields with short runways and are required to cope with hot and high conditions.

Falcon aircraft are also more economical to operate and more environment friendly than other large cabin aircraft. Their aerodynamically efficient design, lower weight and fuel efficient engines from Pratt & Whitney that provide lower fuel burn and lower emissions of NOx than other airplanes in their class, makes the aircraft highly cost effective to operate. The Falcon 7X can connect Mumbai to Cape Town or Bangalore to London City Airport in one hop. The Falcon 7X is the only business jet in its category to meet with the demanding performance requirements at airports with restricted operating conditions. The company aptly describes this machine as “the embodiment of passion and performance, born of desire to transcend today’s capabilities”. •



STATE-OF-THE-ART GLASS COCKPIT BY HONEYWELL IN FALCON 7X





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Hawker Beechcraft – What's on display at India Aviation

HAWKER 4000

The flagship of the Hawker line, the composite fuselage Hawker 4000 sets the standard in India for quality, performance and value in the super-midsize business jet class. Lighter and stronger than aluminum, the Hawker 4000's carbon-fibre technology allows for enhanced speed and range performance. With a 3,280 nautical mile non-stop range and cruise speeds up to Mach 0.84, it features an all-metal supercritical wing, powerful Pratt & Whitney Canada FADEC-controlled engines and state-of-the-art Honeywell Primus EPIC avionics. With 1,600 pounds of available payload with maximum fuel the Hawker 4000 has over 15 per cent more payload than its closest competitors and its spacious, stand-up cabin seats 8-10 and can be custom tailored to clients' specifications.

HAWKER 900XP

The Hawker 900XP has combined new Honeywell engines with enhanced winglets and a large cabin for increased performance, range, efficiency, comfort and unprecedented value. It has been the best-selling jet in its class in India over the last decade. It tackles many of the same missions more efficiently than larger, more expensive business jets and its innovative combination of range and speed with cabin comfort and lower operating costs. With room for nine passengers, the ability to land on unimproved runways and more cabin amenities, the Hawker 900XP can take executives anywhere across India and most of Asia.

KING AIR C90GTX

Long India's workhorse, increasing the King Air C90GTX's gross weight has doubled the full-fuel payload, allowing it to fly farther and carry more. Key enhancements to the King Air C90GTX such as the addition of composite winglets have further increased its fuel efficiency. Featuring a cabin 50 percent larger than some very light jets, the C90GTX seats up to seven passengers in its famed squared-oval design, allowing greater passenger comfort. With greater range and efficiency, this entry level twin-turboprop aircraft is ready to meet the needs of owner pilots as well as value-conscious Indian corporations. •



HAWKER 4000



HAWKER 900XP



KING AIR C90GTX

Max MRO Services to grow components market

Air France Industries-KLM Engineering and Maintenance which has taken a stake in Max MRO Services based out of Mumbai is building aircraft components business in India. It has plans of setting up a new facility in India soon for nose-to-tail components solutions.

Sylvain Mounissamy, AFI General Manager said that the company was here for the long haul as the Indian aviation industry was going to surge soon. Presently, the availability of components was limited and airlines had to source them from the Middle East or Singapore. Import of components is prohibitive due to customs duties which range from 16 per cent to 30 per cent. It is cheaper to source from companies located in free zones in the Middle East. The components market in India is worth 1 billion USD which is 8 per cent of the world market. He said that Max MRO would concentrate on the components business though AFI-KLM E&M is into airframe; engine and components business. •

Prabhatam Aviation expanding

Prabhatam Aviation is looking at enhancing the tourism sector in India and is thus expanding its existing fleet of advanced helicopters from Eurocopter family comprising three single/twin engine choppers, with one single engine helicopter to start operations by the end of this month. An order for another single engine chopper has also been made, which will make Prabhatam Aviation the third largest frontline NSOP helicopter charter service provider.

At India Aviation 2012, Rakesh Sharma, CEO, Prabhatam, said that Prabhatam Aviation has customised heli charter packages for devotees and tourists and added that the company will cater to enhance optimum business growth in the civil aviation sector emanating from pilgrimage tourism, adventure tourism, serving the Central Government in natural disasters and medical emergencies through its expanded fleet of helicopters. •



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Power behind the Sukhoi Superjet 100

BY B.K. PANDEY ONBOARD SSJ

On the opening day of India Aviation 2012, United Aircraft Corporation of Russia showcased, the Sukhoi Superjet 100, the latest airliner to enter the Regional Jet market. The exercise involved a 45-minute ride for a group of media personnel. With around 35 on board, the Sukhoi Superjet 100 was airborne after a short take off roll and climbed steeply displaying the high thrust to weight ratio, a feature attributable to the two new SaM 146 1S18 podded engines from PowerJet each delivering thrust of 16,100 pounds. With full authority digital electronic control (FADEC), the SaM 146 1S18 regional engine has received type certification from European Aviation Safety Agency (EASA).

As per Jacques Desclaux, Chairman and CEO of PowerJet, this version



of the engine significantly extends the range of the Sukhoi Superjet 100 Regional Jet. The engines allow the aircraft to operate at higher maximum takeoff weight and provides the aircraft higher range of 4,578 km (2,470 nautical miles) with full passenger load. As of December 31, 2011, the SaM 146 1S18 engines have logged more than 6,500 hours of flying in operations to 40 destinations all over the world. PowerJet is equally owned joint venture between Snecma of France and NPO Saturn of Russia.

The Sukhoi Superjet 100 is the first aircraft to employ this engine. The engine has been conceived and designed to meet customer requirements in respect of fuel burn, cost of operation and dispatch reliability. The engine employs Blisk technology to enhance fuel economy and reduce operating costs. The SaM 146 1S18 engines are the real power behind the Sukhoi Superjet 100. •

Advanced CFM56-7BE maintaining highly successful in-service record



The CFM56-7BE-powered Boeing Next-Generation 737 has maintained a highly successful entry into commercial service. Since the first airplane was delivered to China Southern Airlines in July 2011 approximately 250 aircraft have been delivered to more than 50 operators worldwide. This fleet had logged more than 3,00,000 flight hours to date without a single engine-related issue.

The CFM56-7BE-powered Next-Generation 737 enhanced airplane/

engine combination is providing a two per cent improvement in fuel consumption, which, in turn, equates to a two per cent reduction in carbon emissions. Additionally, the enhanced -7B will provide up to four per cent lower maintenance costs, depending on the thrust rating.

CFM executed an extensive certification programme that included a 60-hour certification flight test program aboard GE's modified 747 flying testbed in Victorville, California. In addition, the CFM56-7BE completed a grueling 150-hour block test at Snecma facilities in Villaroche, France, during which it operated at what is referred to as triple redline: maximum fan speed, maximum core speed, and maximum exhaust gas temperature. This test simulates conditions far more extreme than would ever be experienced in commercial service to validate the reliability and durability of the hardware.

The first full CFM56-7BE type design engine completed ground testing in January 2010, and engine operation and performance was as expected. Overall, the engine completed 390 hours of ground testing (including the block test) and achieved all the technical requirements and met the key objectives for performance improvement, acoustics, engine operation and durability.

CFM uses advanced computer codes and three-dimensional design techniques to improve airfoils in the high- and low-pressure turbines for better engine performance. In addition, the company improved engine durability and reduced parts count to achieve lower maintenance costs.

CFM56 engines are a product of CFM International, a 50/50 joint company of Snecma (Safran group) and GE. •

Bell signs purchase agreement with India Fly Safe Aviation Ltd

India Fly Safe Aviation Ltd (IFSAL) signed a purchase agreement for a Bell 429 during a ceremony at Bell Helicopter's exhibit during India Aviation in Hyderabad.

IFSAL is a trusted name in the aviation industry as a quality service provider of air charter operation both in executive fixed wing aircraft and helicopters located at IGI Airport, Palam, New Delhi. IFSAL has a vast experience of operations, management and customer satisfaction in the field of Aviation Industry. IFSAL has a very experienced set of Managers headed by Brigadier (Retd) T.S. Gill, CEO of the company. The company plans to expand in a big way by induction of another helicopter Bell 429.

SITTING (L TO R): KATHERINE S. DHANANI, CONSUL GENERAL WITH THE CONSULATE GENERAL OF THE US; COLONEL SANJAY JULKA; SAMEER REHMAN, BELL HELICOPTER'S MANAGING DIRECTOR FOR ASIA-PACIFIC REGION AND CAPTAIN EHSAN KHALID.
STANDING (L TO R): RISHI MALHOTRA, GENERAL MANAGER OF BELL HELICOPTER'S INDIA FACILITY; B.S. SINGHDEO, BELL HELICOPTER'S MANAGING DIRECTOR IN INDIA AND ANIRUDH LUTHRA, BELL HELICOPTER'S BUSINESS DEVELOPMENT MANAGER IN INDIA.



Interglobe Established signs 2 MoUs for sale of LET410 aircraft

BY SUCHETA DAS MOHAPATRA

In the backdrop of India Aviation 2012, Interglobe Established Private Limited signed two memorandum of understandings (MoU) for sale of LET410 aircraft in India. The first agreement was signed with Asia Aviation for three LET 410 aircraft which was followed by another for one Let 410 with Turbo Aviation Private Limited.

"We are delighted to announce the sale of the LET aircraft in India. We will be able to carve a separate segment in the 19 seat category that offers versatility of use in Indian weather conditions and provides an opportunity to connect to smaller cities or outlying regions," said Nigel Harwood, President and CEO, The ESTD.

The LET is a 19-seat plane which would be good for short-haul transport necessities in both developed and underdeveloped regions. According to the ESTD officials, the aircraft provides maximum versatility and utilisation of the aircraft for any number of applications and special missions. The aircraft needs only a few hundred meters of airstrip with a minimum strength of 6 kg/sq.com (85 lb/sq.in).

Captain V.K. Kukar, Managing Director, Asia Aviation said that the aircraft will be used in non-scheduled feeder operations and is meant for regional air charter services. Asia Aviation which operates charter services



including air ambulance service; will use the LETs for regional operations, connecting people from remote destinations to regional airports. "We were looking for an aircraft to provide feeder air transport solution and LET410 with its superior operational characteristics is the best aircraft in this class. We are proud to be the first owner of the LET410UVP-E20 in India," said Kukar.

V. Umesh, Managing Director, Turbo Aviation private Limited said, "Our aim is to provide safe, secure and state-of-the-art facilities to our customers and there could not have been a better choice than the LET 410 aircraft."

Mark Kozisek, Director, Commercial and Product Support Director, LET

said, "We are represented by the ESTD here and India holds great potential as a market and we see great demand for LET," and added, "India is among the fastest growing markets in Asia. There is a positive demand for aircraft around the world and we are expecting the same response from India as well."

At present 1,100 LET410 aircraft are operational across the world and the aircraft fits well for charter and scheduled operations because of its enhanced capacity. The aircraft are likely to be in operations in India in another four-five months and the pilots of Asia Aviation and turbo Aviation will undergo a six week training course at the ESTD's facility in Czech Republic. •



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Embraer signs MoU with Air Works for spares repository



BY SP'S CORRESPONDENT

Embraer has signed a memorandum of understanding (MoU) with Air Works India Engineering Pvt Ltd to create a spares repository for all of its executive jets in India. The ceremony took place at the 3rd International Exhibition and Conference on Civil Aviation in Hyderabad.

The MoU paves the way for parts for Embraer's Phenom 100, Legacy 600/650 and Lineage 1000 to be housed in Air Works' facility in Bangalore. The facility in Bangalore will serve as a central hub from which these parts will be dispatched to eight Embraer Authorised Service Centre (EASC) locations in the country.

"This move reinforces our customer support offerings to owners and operators in India as it enhances the preparedness and ability of the EASC's to maintain and manage our executive jets for optimal operation," said Andre Sousa, Director, Customer Support and Services - Asia Pacific, Embraer Executive Jets. "We see this as an essential move and a reflection of our commitment to superior customer support in a market where a third of all Embraer executive jets in the region are based."

Speaking on the occasion, Vivek N. Gour, Managing Director, Air Works India Engineering Pvt. Ltd said, "We are extremely proud to extend our association with Embraer and setup a forward stocking location for its range of executive jets in India. This enhances our service spectrum for the Embraer customers in India and helps provide them a reduced turn-around time in procurement of parts for their aircraft."

India is the third country in Asia Pacific in which Embraer has placed a parts depot. The move also complements the role of Embraer's Regional Distribution Center (RDC) based in Singapore as well as its facility in Australia. •

Embraer redefines Legacy

Embraer has made improvements to its Legacy 600/650 jets that refines the interior, features a state-of-the-art cabin management system and offers increased efficiency and safety for aircraft operations, significantly raising the bar for its class. The new versions, with a host of new options, are now available for standard aircraft produced in 2012.

"These changes are specifically designed to increase cabin comfort and capabilities to ensure passengers have the right environment to either relax or maintain their productivity," said Ernest Edwards, President Embraer Executive Jets. "Key to this is our effort to reduce cabin sound levels, which set a new benchmark for the Legacy 600 and Legacy 650 class of aircraft. Complementing the new features is a full, high definition entertainment system."

Customers will be able to see the improvements during the worldwide demonstration tour we will launch in March."

The new interior includes the Honeywell Ovation Select, all digital, cabin management system and a state-of-the-art system that is also offered on the Legacy 450/500. It features a full, high-definition video system and media input and includes iPod and iPhone docking systems, USB, HDMI, VGA and Composite Video ports, blu-ray player and a 3-D moving map. There is an 8.9 inch touchscreen CMS passenger control monitor in the galleys for master control of video, audio, lighting, temperature, and water and individual touch screen controls located throughout the cabin. Also included is the XM Radio for US operations. A 17.5 inch LCD monitor comes standard but customers can choose from a number of monitor options including up to a 32 inch credenza version, 24 inch bulkhead configuration or individual seat monitors. These can be complemented by a crisp, two-zone surround sound.

In addition to the Ovation Select system, Embraer has improved the interior storage and added a new, wireless handset Iridium telephone system. The company is also offering restyled seats with side-pocket storage and greater swivel movement in the third zone. Embraer now offers new finishing materials including 12 species of standard veneers in addition to six optional premium veneers. For the wet areas in the galley and lavatory, a selection of six natural stone flooring choices is available.

Improvements for the 2012 Legacy 600/650 are not restricted to the cabin and are designed to reduce pilot workload as well as improve the flexibility, efficiency and safety of aircraft operations. The cockpit features improved avionics with the Honeywell Primus Elite which won Flying Magazine's 2010 Editor's Choice Award. The Elite system includes LCD displays and a Cursor

Control Device (CCD) as well as charts and map capability and XM Weather for US operations.

To ensure the 2012 Legacy 600/650 is equipped for the changing air traffic control system, Embraer incorporated VNAV and RNP 0.3 for optimising air-



space use, flight time and fuel burn. WAAS/LPV along with CPDLC FANS 1/A which enables SATCOM-based ATC communications for transoceanic flights are available as options as are Smart Landing and Smart Runway surface awareness and advisory system. •

Continued from SP's ShowNews Day 1

INDIA AVIATION '12



'Dassault's share of the Indian market is already strong and growing'

INTERVIEW WITH JOHN ROSANVALLON
PRESIDENT & CEO, DASSAULT FALCON JET

SP's ShowNews (SP's): Can you briefly describe the network of production and support facilities that Dassault has established to cater to its global customer base?

John Rosanvallon (Rosanvallon): We've made a long-term commitment to all our Falcon operators for continuously improving our services. The current crisis has not changed our action plan in this regards, either. We are increasing our own maintenance capacities and extended our authorised service centers network.

The Dassault Falcon Customer Service Network currently includes more than 40 service centres and 13 spares centres strategically located worldwide, alongside access to the most advanced maintenance and communications technology, including e-maintenance and direct data broadcast, for fast and efficient technical support and assistance. Our "go teams" started some years ago as an emergency service, dispatching our technicians anywhere in the world on a moments notice. Today, that spirit of urgency has spread to become part of every aspect and anyone at Dassault worldwide. All the Dassault employees are committed to the Go Team Spirit—doing "whatever it takes" to keep our owners flying.

SP's: What is the share of the market that Dassault Falcon Jet commands globally and who are the existing as well as emerging competitors in the regime of executive jets?

its role in developing business across the country and increasingly beyond, internationally and globally. Reaching business centres across such a large country and globally, will increasingly entail the use of private aircraft as essential business tools.

Regulation and basic infrastructure, such as local airports and FBOs, may be lagging behind the demand emerging for business aviation, but there is little doubt that business jets will add impetus to the already thriving Indian economy. Studies clearly show the positive economic impact of business aviation.

Dassault's share of the Indian market is already strong and growing. Private investment in aviation infrastructure, supported by the Indian authorities, makes the dynamic market even more attractive. We are consolidating this position with an increase in local customer support and parts services. A network of new authorised service centres is also under consideration in addition to Air Works Mumbai which was approved last May.

More than a 20 Falcons are currently operating from airports in Bangalore, Chennai, Delhi, Hyderabad and Mumbai, and another 10 aircraft are on order for delivery to Indian customers within the next two years. We estimate the potential of a hundred new sales in the next ten years.



Rosanvallon: While all aircraft makers suffered during the downturn, the large cabin jet segment in which Dassault is positioned has fared better than most. Possibly it is due to the increasingly global nature of business, but our long-range large cabin jets are still on demand by many countries—especially in the BRICS. Falcon's efficiency, versatility and resale value are timeless values for companies worldwide. This allows us to enjoy anywhere between 30 to 40 per cent of sales in what we call the high end segment. We share this market with Bombardier and Gulfstream. Dassault Falcon has always had a leadership position in Europe, Latin America and India.

SP's: How does the company perceive the market for executive jets in the Asia-Pacific region to be in the next 20 years with specific reference to India and China?

Rosanvallon: The worldwide market for business jets seems to be recovering though more slowly than we'd like. The larger traditional markets in the US and Western Europe are still below sales levels we saw before the global economic crisis. On the other hand, we have experienced good levels of commercial activity in Russia and Latin America in 2011. The best news came from China which has been our number one market last year.

As India's economy continues to emerge, the private sector is playing

SP's: What are the technological innovations and other measures being adopted by the company to address the growing environmental concerns?

Rosanvallon: The long-term growth of our industry will mostly depend on our capacity to provide efficient solutions satisfying the specific transportation needs of our customers and answering the environmental issues. Dassault is at the forefront of research and development that can be applied to improve the performance, comfort, efficiency and environmental footprint of future generations of aircraft. The company plays a key role in the Advisory Council for Aeronautical Research in Europe (ACARE), a group set up by the industry, government and academia to develop an aviation strategic research agenda for 2020; the European Union's Clean Sky programme, which seeks to develop new technologies to reduce noxious emissions and noise on aircraft that will enter service at the beginning of the next decade. Dassault engineers are well on the way to meeting aggressive new environmental goals set under these initiatives. These include a 50 per cent reduction in carbon dioxide (CO₂), an 80 per cent cut in nitrogen oxides (NO_x) and a 50 per cent drop in perceived noise on the ground. •

(Concluded)

Raytheon's AutoTrac III enables Indian airspace harmonisation

Raytheon's next generation air traffic management system, AutoTrac III (AT3), is now operational at three Indian airports run by Airports Authority of India – Delhi, Mumbai and Chennai – covering three of the four Indian Flight Information Regions (FIRs). These installations are an important milestone in AAI's plans for the modernisation of India's airspace in order to accommodate projected levels of growth in the region's air traffic.

Recently Airports Authority of India won the prestigious Jane's Award for achieving the best operational efficiency through its upper airspace harmonisation programme for the Chennai FIR. The award was presented to AAI's V. Somasundaram, Member (ANS), at a ceremony conducted at the ATC Global Conference in Amsterdam on the March 5, 2012, in the presence of chief executive officers and top executives from the world's leading technology companies and Air Navigation Service Providers.

The challenging goal of providing upper airspace harmonisation in the Chennai FIR was enabled by the installation of Raytheon's Next Generation ATM Automation system, AutoTrac III. AutoTrac III's Advanced Signal and Flight Data Processing Systems allowed for the seamless integration of 5 dynamic air space sectors, 10 radars, and the implementation of ATS Inter-facility Data Communication (AIDC). This new highly integrated system approach is providing a dramatic improvement in the operational efficiency of the Indian air space system. The restructuring of air space in Chennai FIR alone would result in fuel savings of 22.3 million litres per annum to the operators, on a conservative estimate, apart from substantial reduction in carbon emission.

"Raytheon is very proud to be part of this important initiative for India and we congratulate Airports Authority of India on this distinguished and most deserved honor," said Steve duMont, Managing Director of Raytheon's ATM business, "AAI is truly a world leader in air space modernisation, and Raytheon is committed to our continuing close partnership with them on this transformational endeavor."

The AutoTrac III system is an advanced, cost-effective solution to the challenges facing the ATM community in the 21st century – traffic growth outpacing revenue growth and the drive to increase capacity and productivity in a cost conscious environment. The AT3 system, with its modern open architecture design and high performance characteristics, is fully adaptable and scalable to any ATM environment, ranging from a simple tower automation application to a fully integrated national multi-centre system. •

Powerfly introduces 'timeshare' concept

BY R. CHANDRAKANTH

Captain G.R.Gopinath ushered in 'Simplify' with the launch of low-cost airline Air Deccan (sold later to Kingfisher Airlines). Now, he has pioneered another venture in the aviation business in India. He introduced the concept of 'timeshare' with the launch of Powerfly Vacations in 2011 and one year in its operations, it is making substantial headway.

Powerfly has seven corporate members using the 'timeshare' model and it hopes to double the number of members and increase the fleet size from 22 aircraft. Powerfly is a Deccan and Taj Air alliance which gives members/customers access to jets, turboprops and helicopters. It fulfils travel needs with a hassle-free, world class concierge service.

A spokesperson of Powerfly told *SP's ShowNews* "Through Powerfly the customer has a choice of accessing a range of aircraft from light to large jets, turboprops and helicopters either through on-demand charter or by becoming a premium member. The member also gets discounts on Taj Properties."

In India due to various regulations, 'fractional ownership' of aircraft did not take off, but the concept of 'timeshare' has. "We will be adding another three jets this year as there is growing interest and demand." Powerfly has aircraft bases at Bangalore, Bhubaneswar, Delhi, Jammu, Kolkata and Mumbai. The fleet includes Citation CJ2; Hawker 850XP; and Falcon 2000 (all jets); Pilatus PC 12; Kingair B200; and P180 Avanti II (all turboprops) and Bell 206; Bell 407; AS 350 B3; AS 355 F1; and Bell 230 (all helicopters). •



Helicopters for EMS, major projects need to be developed: Indocopters

BY R. CHANDRAKANTH

Presently almost 100 per cent of helicopter usage is for passenger transport when it has enormous potential for other operations such as Emergency Medical Services (EMS); moving goods in inaccessible areas etc and Indocopters is eyeing that market, according to Sanjeev Choudhary, Senior Vice President, Head – Sales & Business Development, Indocopters.

In the Himalayan region alone the requirement for helicopters could be about 100 as many power projects, border road development etc were happening, but were time-consuming because of the mode of transport – mules or by foot. "A power project costs over ₹3,000 crore and investment in a helicopter which is upwards of ₹12 crore is nothing, but the cost and time advantage it gives in the project development is enormous."

Indocopters intends to tap this market, but it is going to be an arduous task of getting these companies to realise the cost-benefits. "Many power companies have shown interest and it is a matter of time before they adopt."

The potential to use helicopters for various operations are enormous. Sanjeev said EMS is one area. "The question is who is going to own



the helicopters – hospitals, third party operators or someone else. In the West, there is insurance and that takes care of movement of patients. Here we are talking to insurance companies and hope that they take the initiative."

INDOCOPTERS GROWTH

Sanjeev mentioned that last year 14 helicopters were registered in India and Indocopters accounted for three new inductions. For Indocopters, the number is expected to double in 2012 (with four single engines and one twin engine). "It is a fairly good number, but we can do better if there were no regulatory issues."

However, Indocopters believes in the Indian market which has great potential except that the regulatory authorities have to get their act together. "It includes the DGCA, Customs, Ministry of Civil Aviation etc. It is a nightmare to get an engine overhauled as it would mean importing components and the exorbitantly high customs duties prevent one from doing so. We are losing out to Singapore and other countries." •

Continued from SP's ShowNews Day 1

'PowerJet is setting up a state-of-the-art customer support and service structure'

SP's ShowNews (SP's): What steps has the company taken to provide product support worldwide to the Superjet100 powered by its SaM146 aero engine?

PowerJet: PowerJet has developed a specific SaM146 support organisation called PowerLife ensuring fast and reliable access to information and assistance under any circumstances.

As a single point-of-contact for all support services, PowerJet customer support organisation and service draws on the extensive experience of Snecma (via CFM International as well as its own military engines) and NPO Saturn.

PowerJet is setting up a state-of-the-art customer support and service structure that will meet all airline expectations. Reflecting the proven global expertise of CFM, this organisation is tailored to the regional jet market. It comprises a Customer Support Centre, technical assistance drawing on both parent companies, and a dense network of field representatives, based on infrastructures already deployed by Snecma and NPO Saturn.

SP's: Has PowerJet explored opportunities for powering regional jets other than the SuperJet100 and if so what are the possibilities in this regard?

PowerJet: The SaM146 was designed for a thrust range from 13,500 to 17,800 lb. The first application for this engine is of course the Superjet 100, but PowerJet would consider all possible applications for this engine, on both new aircraft as well as retrofits on current aircraft in the 70 to 120 segment.

SP's: Has the PowerJet experience opened fresh avenues for collaboration between the European and Russian aerospace industries?

PowerJet: Snecma and NPO Saturn have set up many partnerships within the SaM146 programme. The VolgAero plant, inaugurated in October 2005, is a state-of-the-art production plant. It includes over 10,000 square metres of workshops, plus another 2,500 square metres of offices. VolgAero primarily makes parts for the SaM146: fan disk, low-pressure spool, casings, HP, supports for bearings, intermediate casing, exhaust casing and all accessory components. The plant has three product lines—rotating parts; mechanical and mechanically-welded casings; and engine accessory components. It also offers shared facilities for chemical, thermal and surface treatments (plasma, shot-penning, sand-blasting, etc.).

In 2007, Snecma and NPO Saturn built an open-air test bench in Poluevo, Russia (near Rybinsk), to handle certification tests for the SaM146. This test rig covers three types of testing: performance, certification tests (operation in cross-wind, water, ice and bird ingestions), and acoustic certification of the propulsion system. The only open-air test cell for this type of engine in Europe and Russia, it can also handle other engines.



SAM146 UNDER THE WING

Many Safran group companies are also involved with Russian industry in the SaM146/Sukhoi Superjet 100 programme:

- **Snecma:** SaM146 engine
- **Aircelle:** nacelle and thrust reversers
- **Hispano-Suiza:** engine control system
- **Microturbo:** air turbine starter
- **Techspace Aero:** engine lubrication unit
- **Cenco Inc.:** open-air test cell
- **Sagem:** engine over speed unit
- **Messier-Bugatti-Dowty:** Superjet 100 landing gear system
- **Snecma Propulsion Solide:** mixed flow nozzle •

(Concluded)

Irkut's MC-21 Airliner to pamper passengers

BY R. CHANDRAKANTH

Wide and comfortable seats, extra leg room and more space for cabin baggage are usually a luxury only business class travellers can afford. Now, the economy class traveller can indulge in the same extravagance should airlines begin incorporating the MC-21, designed and built by Russian plane-maker Irkut Corp, into their fleet.

With 235 international orders already in the bag, Irkut hopes to become a game changer in the airline industry when it begins the first round of deliveries of the MC-21 in 2017. Designed to save 24 per cent in fuel consumption, reduce about seven minutes in turnaround time, besides carrying more passengers per trip, Irkut claims of achieving extra profits of \$5 million per year for airlines if they fly the MC-21, according to Kyrill Budaev, Vice President (Marketing), Irkut Corp.

Irkut plans on setting up service centres for maintenance and repairs in countries that use the MC-21. "Our approach is to go to the airlines, ask



them in what way they provide services and negotiate with them to provide the same. It is not a matter of money but about how many aircraft are sold worldwide," he said.

Attributing additional cabin space of 30 per cent to a wider fuselage, its other features include innovative technology like improved aerodynamics, new engines from Pratt-Whitney use of composites in the wing's load-bearing to make it lighter and thus travel faster.

"Our goal is to provide the future level of comfort. The game is changing every year, we hope to be the game changers with the MC-21," Kyrill said.

Irkut intends to manufacture 40 aircraft in the first year and double the target to 70 the next depending on the demand. The aircraft manufacturer also aims on increasing the overall additional profit of an airliner by \$4 million. On board climate control will also ensure that children and older passengers who usually suffer from air-sickness will feel much better thanks to the modern biological filters fitted inside the aircraft. •

Airbus hopes high from India

BY SUCHETA DAS MOHAPATRA

Airbus once again reiterated that India is a key market for the company and stated that the Airbus market share of new aircraft orders in India is over 70 per cent. Addressing a press conference on the second day of India Aviation, Airbus officials stated that keeping this in view, the company is strengthening its six pillars in the country. "We continue to see growth in India both in short-term and long-term. Since 2005, we have sold 500 aircraft in India and have over 70 per cent market share. We see that there will be additional requirements," said, Joost Van Der Heijden, Head of Marketing, India, Airbus.

According to the company, India's annual passenger traffic growth which is 7.2 per cent is well above the growth in Asia Pacific (5.9 per cent) and world average of 4.8 per cent. By 2030, India's passenger fleet will be more than triple to about 1,180 aircraft. The new passenger aircraft will include 646 single aisles like the A320 and A320neo family, 308 twin aisles like the A350 XWB and A330, and 66 very large aircraft such as the A380. "Despite the challenges, India's growth in domestic air travel will reach even higher growth rates of nearly 10 per cent annually, making it one of the fastest growing aviation markets anywhere in the world."

The officials spoke in detail about the company's six pillars of cooperation in India—Airbus Engineering Centre India (AECI), pilot and maintenance training, aerostructure design and build, research and technology and other initiatives including spares centre, MRO, etc. Airbus relationship with India began with the sale of A300 35 years back and was followed by collaboration with HAL, which is still going strong. Over the years, Airbus has had partnerships with many private Indian companies as well. And today, half of all A320 forward doors and all flap track beams are manufactured in India. The company has a long-standing partnership with HAL to produce 50 per cent of forward passenger doors for all A320 family aircraft. Likewise, it has a partnership with Dynamatis for assembly of flap-track beams for the A320 family aircraft; and with Tata to produce composite parts for A350 XWB programme. Speaking about the engineering capabilities of India, Srinivasan Dwarkanath, Vice President, Industrial Cooperation, Asia-Pacific and Middle East, said that many complex components are being made in India. "Every A320 today is partly made in India."

EADS is looking for a partner for establishing a maintenance, repair and overhaul (MRO) facility in the country for Airbus. "We have met 85 to 90 per cent of the offset clause and we are now working with different private companies in India trying to ensure that MRO in India will be materialised soon," said Dwarkanath.

"India produces 3,000 to 4,000 engineers every year. The AECI in Bangalore has become a regional hub and personnel from 23 airlines have already undergone training at the centre. The AECI has employed 270 local



engineers working in high end analysis and design on all Airbus products. The centre is expected to grow to 450 in the next three years. The second pilot training centre has been setup in the National Capital Region in cooperation with CAE and Interglobe to complement the existing facility in Bangalore. Together, these centres will have the capacity to train up to 5,000 pilots and maintenance engineers every year."

On being asked whether the present critical state of the airlines in India will affect their present and future orders, Heijden said, "We see Indian carriers as our partners and keep discussing how we can help. And in fact the growing fleet will help airlines recover and grow. Further India is a young market and the new aircraft burn less fuel, thus lowering the cost of the airlines operations." With regard to the orders for A380 from Kingfisher, Heijden said that the order is still there. •

SRK Aviacom offers simulators for India

BY R. CHANDRAKANTH

From now to 2026, the requirement of pilots would exceed 3.5 lakh globally, driven by emerging aviation markets, including India and China. The current infrastructure for training pilots will not be able to sustain these numbers and there was need to go for massive induction of simulators, said Rene Veerman of Multi Pilot Simulations (MPS) JV which manufactures Boeing and Airbus professional flight simulation training devices (FSTD).

MPS was originally created out of a need for high-quality flight training after recognising a major deficiency in the level of training at which ab initio pilots were 'delivered' to airlines. The Boeing 737NG (600/700/800/900) and Airbus A320 (A318, A319, A320 and A321) simulators are designed for type-rating, jet orientation course, recurrent training and MPL training.

Rene said the simulators from MPS were highly cost-efficient way of training pilots. "We are looking to a healthy future in India."

MPS is represented in India by SRK Aviacom which is engaged in providing 'total solutions for aviation' including sales/support of flight simulator, aircraft/helicopter, aviation business consultancy, air charter flights, etc.

The products SRK Aviacom are representing include – Remos aircraft (made in Germany and meant for personal use, corporate, flight schools etc); Elite Simulation Solutions AG (advanced PC driven aircraft and helicopter simulators); and Adacel (supplier of simulators for training of ATCs in both civil and defense environments), said Captain Sanjay Kumar, Executive Director of SRK Aviacom. •



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