

HELICOPTERS: LOOKING FORWARD P 11



TION:

BUSINESS AVIATION: ENCOURAGING GROWTH P 23





REGIONAL AVIATION: CONNECTIVITY ENHANCED
TRAINING: ROUTE TO THE COCKPIT
HELICOPTER EMERGENCY MEDICAL SERVICES

2012 THE BEST AND THE WORST



AN SP GUIDE PUBLICATION



Replacing a big old jet with a big new jet could be a big old mistake. Airplanes age; they get replaced. Simple as that? Not really. Why replace a big old jet with a big new jet? Especially when our smaller, more efficient E-Jets can fly the same routes as larger jets while delivering an equal or better passenger experience. E-Jets give you options. Like filling schedule gaps without excess seat capacity. Or capturing new markets by going where other airlines can't. The question is how to evolve toward greater efficiency. Make no mistake; the right answer is E-Jets.

Discover the full range of E-Jet capabilities at EmbraerCommercialAviation.com



850+ E-JETS. 60 AIRLINES. 41 COUNTRIES.

LOVE WHAT YOU FLY

TABLE OF CONTENTS







AIR TRANSPORT / ATM

△ P29 LIAISON SANS SYNERGY

If the Indian ATC persists in adopting a rigid and inflexible attitude in dealing with foreign aircraft, it will, in all likelihood, be relegated to being the 'pariahs' of the industry.





HELICOPTERS / MEDICAL SERVICES

△ P31 FOR EMERGENCY SERVICES

HEMS are a crucial element in saving precious lives. All stakeholders must work together to take on this national challenge and social responsibility.

Indian domestic passenger traffic has grown with a CAGR of 15 per cent during last five years and now all the domestic carriers, except GoAir, also fly on international routes. Photograph: Finnair



AIR TRANSPORT / OVERVIEW

✓ P13 THE BEST & THE WORST

In India, civil aviation has the potential to create a revolution similar to the one seen in mobile telephony. This is possible with the right vision, roadmap, regulatory framework and relentless focus on quality and cost.



AIR TRANSPORT / REGIONAL AVIATION ✓ P21 REGIONAL VIS-À-VIS LOW-COST Low-cost carriers have become the norm in India. Legacy options are used only by the rich tourists, the excessively affluent Indian, or executives travelling at company or

government expense.

AIR TRANSPORT / REGIONAL AVIATION

Cover

✓ P16 NEED FOR NURTURING

AAI estimates that traffic from nonmetro airports is already growing twice as fast as that from the metros and may hit 45 per cent of the total within just five years.

P8 TECKNOW

P10 FIRST

- **P11** HELICOPTERS / MARKET OUTLOOK LOOKING FORWARD
- **P18** INFRASTRUCTURE / REGIONAL AVIATION **CONNECTIVITY ENHANCED**
- **P23** BUSINESS AVIATION / **OVERVIEW ENCOURAGING GROWTH**
- **P25** TRAINING / PILOTS **ROUTE TO THE COCKPIT**
- **P27** AIR TRANSPORT / AIRLINES THE REFORMATION

DEPARTMENTS

- P2 **A WORD FROM EDITOR**
- P4 **NEWS BRIEFS**
- **P32 FINALLY**

A WORD FROM EDITOR



PUBLISHER AND EDITOR-IN-CHIEF Iavant Baranwal

Air Marshal (Retd) B.K. Pandey

R. Chandrakanth (Bengaluru)

SENIOR COPY EDITOR & CORRESPONDENT Sucheta Das Mohapatra

CONTRIBUTORS

Dr Mani Sishta, B.N. Gokhale, Group Captain (Retd) A.K. Sachdev, Arun Lohiya, Group Captain (Retd) Joseph Noronha, Captain Ajit Agtey, S.R. Swarup, Vasuki Prasad, T.P. Srivastava, Group Captain (Retd) R.S. Makker, Air Commodore (Retd) K.B. Menon

EUROPE Alan Peaford, Phil Nasskau

CHAIRMAN & MANAGING DIREC Jayant Baranwal

PLANNING & BUSINESS DEVELOPMENT Executive Vice President: Rohit Goel

ADMIN & COORDINATION Bharti Sharma

SENIOR ART DIRECT Anoop Kamath

GRAPHIC DESIGNERS Vimlesh Kumar Yadav, Sonu Singh Bisht Research Asst/Graphics: Survi Massey

SALES & MARKETING Director Sales & Marketing: Neetu Dhulia General Manager Sales: Rajeev Chugh

SP'S WEBSITES

Sr Web Developer: Shailendra Prakash Ashish Web Developer: Ugrashen Vishwakarma

© SP Guide Publications, 2012

ANNUAL SUBSCRIPTION Inland: ₹600 • Foreign: US\$180 E-mail: subscribe@spguidepublications.com

LETTER TO EDITOR editor@spsairbuz.net

FOR ADVERTISING DETAILS CONTAC

guidepub@vsnl.com neetu@spguidepublications.com rajeev.chugh@spguidepublications.com

SP GUIDE PUBLICATIONS PVT LTD

A-133 Arjun Nagar (Opposite Defence Colony), New Delhi 110 003, India.

Tel: +91 (11) 24644693, 24644763, 24620130 Fax: +91 (11) 24647093 Email: guidepub@vsnl.com

BENGALURU, INDIA 204, Jal Vayu Vihar, Kalyan Nagar Bengaluru 560043, India. Tel: +91 (80) 23682204

www.spguidepublications.com

Owned, published and printed by Jayant Baranwal, printed at Kala Jyothi Process Pvt Ltd and Published at A-133, Arjun Nagar (Opposite Defence Colony), New Delhi 110 003, India.

All rights reserved.



HE YEAR 2012 IS coming to an end but not on a happy note as far as the civil aviation industry in India goes. The impressive performance of the airline industry in 2011 with growth rate in passenger traffic touching 20 per cent was a reflection of the fact that the industry was on the right track. It had also raised hopes of India actually moving from being the ninth largest aviation market in the world today to the fourth slot by the end of the next decade. But within a year or so, the industry appears to have been hit by a crisis. Passenger traffic has

been declining and all carriers are posting losses. Even IndiGo, that had been reporting profits consistently for the last three years, appears to be doddering financially. Kingfisher Airlines for all practical purposes is already out of business and despite some feeble attempts at revival; restoration to its once glorious status appears to be outside the realm of possibility. The heavily indebted national carrier Air India continues to survive with periodic infusion of funds from the government and is believed to be losing over ₹400 crore per month.

In the cover story in this issue, Amber Dubey, Partner and Head-Aviation, KPMG India, says that for the airline industry it is "the worst of times" because the sector is reeling in the face of challenges. Bleeding airlines, falling passenger and cargo traffic, rising fares, high airport charges, frequent strikes and worried financiers have grabbed the headlines in the recent past. As per the author, there still is hope for the industry as the government is seized of the problem and fundamental policy changes are indeed under way. Shriniwas Mishra, an aviation analyst based in Mumbai, is of the view that the underlying factors that plague the industry most are lack of strategic planning, flawed policy formulation and failure of the government to effectively address the critical issues.

A.K. Sachdev observes that despite the several impediments to growth and lack of support by the government, business aviation is likely to do well as its contribution to the well-being of the corporate sector is well understood in the business world. He also evaluates the low-cost model vis-à-vis legacy carriers and concludes that the former appears to be sturdily ensconced in the Indian civil aviation industry. Joseph Noronha analyses the reasons as to why regional aviation in India is not growing at the rate it should in a country like India. It is evident that for regional aviation to carve a niche in the airline industry, India needs at least 200 additional airports connecting the large number of smaller cities to metros. Captain S.R. Swarup highlights the qualitative difference in attitude and response of air traffic control in the West as compared with that in India, especially towards business aviation traffic. B.S. Pawar examines the global market for helicopters and R. Chandrakanth looks at the development of regional airports by the private sector.

For *SP's AirBuz*, this month is special as it completes five years since launch in 2008. For us, the study of the civil aviation industry in India and abroad has been a rich and rewarding experience. We are grateful to our contributors, readers and well-wishers for their support to our endeavours. We continue to look forward to your patronage.

We at SP Guide Publications wish you a very happy and prosperous year ahead!

B.K.Pandey Editor

1003 innovations. 30 years of experience. 3 aircraft applications. 1 huge leap forward for engine design.

Another proven breakthrough for LEAP technology.

The numbers tell the story. Hundreds of patented LEAP technological innovations and nearly 600 million hours of CFM* flight experience all add up to a very special engine you can count on for the future. Visit cfmaeroengines.com



✤ INDUSTRY

AIRASIA ORDERS 100 AIRBUS A320



Malaysian carrier AirAsia has placed a \$9.4 billion order for 100 Airbus A320 family of aircraft. The order calls for 64 A320neo and 36 A320ceo planes as the airline looks to expand its network to the Philippines and Japan. The new aircraft will add to AirAsia's current all-Airbus fleet that currently has 10 aeroplanes. "We have virtually three gold mines in Malaysia, Thailand and Indonesia. On the other hand, Philippines and Japan have enormous potential growth. Induction of these new aircraft is in conformity with our strategy to further build our already extensive network through new routes and allow AirAsia to maintain its market leadership," said Tony Fernandes, CEO of AirAsia.

AVIANCATACA ORDERS 15 ATR 72-600S Latin American aviation group AviancaTaca has placed a \$700 million order for 15 ATR 72-600 aircraft, including options for an additional 15 aircraft. ATR will begin delivering in June 2013 the turboprop aircraft ordered. The group is looking to increase its network capacity to destinations in Central America, according to AviancaTaca CEO Fabio Ramirez. "This is indeed a major contract for ATR as we are signing with a wellreputed and leading-edge air transportation provider in the Americas. We are proud to be a part of the expansion of AviancaTaca," said Filippo Bagnato, CEO of ATR.

ORDER FOR MITSUBISHI MRJ90

St George, Utah-based SkyWest Airlines placed a firm \$4.2-billion order with Japan's Mitsubishi Aircraft to purchase 100 MRJ90 aircraft with an option for up to 100 additional jets. The deal is worth a total of \$8.4 billion if SkyWest confirms the 100 optional MRJ90. The 90-seater MRJ90 regional jet is powered by the Pratt & Whitney PW1200G engines. Mitsubishi expects to start deliveries of the new jets beginning in 2017. "Sky-West believes the MRJ, with its significant advancements in fuel economy, passenger comfort and environmental friendliness, will be a value addition to our fleet. We are looking forward to strengthening our relationship with Mitsubishi Aircraft, said Bradford R. Rich, President, SkyWest.

QATAR ORDERS AIRBUS AIRCRAFT

Qatar Airways has increased its order for the largest variant of the Airbus A350 XWB, the A350-1000, from 20 to 37. The airline also increased its order for the A350-900, from 40 to 43 and dropped a previous order for 20 of the smaller A350-800. Qatar's total order now stands at 80 A350 planes, as it looks to expand its fleet with more seats to meet growing passenger traffic in the Middle East. The mid-sized wide body A350 XWB is scheduled for entry into service in 2014. "We have taken the time necessary to come to today's decision in favour of the larger A350 XWB models which we believe are best suited to our business model," said Akbar Al Baker, CEO of Oatar Airways.

AIRBUS AIRCRAFT FOR SINGAPORE AIRLINES



Singapore Airlines (SIA), the launch customer of the A380 in 2007, plans to order 25 more wide body aircraft from Airbus comprising five A380 Super Jumbo and 20, A350-900. The A350 XWB is an all-new mid-size long-range product line comprising three versions and seating between 270 and 350 passengers in typical three-class configuration. SIA has received all the 19 aircraft ordered so far and these aircraft operate to 10 destinations around the world from its Singapore hub. The new A350 XWB order will see the airline double its backlog for the all-new aircraft from 20 to 40. The A350-900 fleet will be used by the airline on both medium- and long-haul routes. The A380 is in operation with nine airlines. As of date. Airbus has recorded 257 firm orders for the A380 from 20 customers.

PRODUCTION RATE: BOEING 777

In order to meet the growing demand, Boeing has enhanced its production rate of the Boeing 777 by nearly 20 per cent to 8.3 aircraft per month. Boeing has had to enlarge its workforce substantially to sustain the new monthly production rate. The first Boeing 777 aircraft will be a freighter to be delivered to Korean Air in February 2013.

OUTLOOK FOR GLOBAL AIRLINE INDUSTRY 2013

As per Tony Tyler, Director General and CEO, International Air Transport Association (IATA), financial outlook for the global airline industry compiled by his organisation indicates that although the industry is moving in the right direction, yet the year ahead is expected to be a difficult one. However, net profits are expected to rise to \$8.4 billion giving the industry a profit margin of 1.3 per cent.

IATA expects the US airlines to make a combined net profit of \$3.4 billion, a \$1 billion improvement over the previous year. The improvement is forecast on the basis of restructuring and cost-cutting measures adopted by the US carriers in the context of weak economic growth.

"But the positive shift is not moving airlines anywhere near the seven to eight per cent that would be needed to cover the industry's cost of capital. It's a tough business working hard to make it through tough times," Tyler said. Airlines in the Asia-Pacific region are expected to post net profits of \$3.2 billion and airlines in the Middle East are expected to make a profit of \$1.1 billion. European and African carriers are expected to have another break-even year in 2013, largely due to economic uncertainty in Europe and the somewhat uncertain performance by the airlines of Africa.

NEW AIRBUS A330-300 FOR JET AIRWAYS



In December 2012, Jet Airways took delivery of the first of four new Airbus A330-300 series aircraft for its fleet at the French aerospace major's headquarters in Toulouse, France. The second aircraft is to arrive soon. The airline already has in its fleet 11 of the smaller variant A330-200 aircraft, shorter than the A330-300 by 17.7ft. Each of the new A330-300 aircraft will replace an existing A330-200 aircraft. Compared to the A330-200, the new A330-300 has an additional 73 seats, four première business class and 69 economy seats. The flight deck is common between the two

variants. The aircraft are configured with 34 seats in première and 259 seats in economy. Jet continues with Welsh seat manufacturer Contour, though it has dropped the 'Herringbone' configuration whose design a court ruled in favour of Virgin Atlantic.

INDIA'S DOMESTIC AIR TRAFFIC

As per IATA's Airline Industry Forecast 2012-2016, among the top five globally, India's domestic air travel market would be the second-fastest growing in the world over the next four years, behind Kazakhstan but ahead of China. The report says that only Kazakhstan, India and China would experience double-digit growth in domestic passenger traffic during the period, recording 22.5, 13.1 and 10.1 per cent growth respectively and collectively adding a total of 49.3 million new passengers. By 2016, the five largest markets for domestic passengers would be the United States (710.2 million), China (415 million), Brazil (118.9 million), India (107.2 million) and Japan (93.2 million). Globally, the IATA industry traffic forecast showed that the airlines were expected to fly about 3.6 billion passengers in 2016, which is about 800 million more than the 2.8 billion carried by them in 2011. In terms of air cargo too, India would be among five fastest growing international freight markets in the 2011-16 period.

NEW AIRLINERS FOR TURKISH AIRLINES



Turkish Airlines has placed a \$4.7-billion order for 15 Boeing 777-300ER aircraft with option for an additional five aircraft. The order, the largest in the history of Turkish Airlines, is in conformity with the projected growth in commercial passenger demand in the Middle East over the next decade. "It is testament to the key role the Boeing 777 has played in the carrier's long-haul route expansion," said Todd Nelp, Vice President of European Sales at Boeing. Turkish Airlines has also placed an order for 15 Airbus A330-300 aircraft. The purchase price or the expected date of delivery of the order has not been specified. "The efficiency, reliability and passenger appeal of our in-service A330 aircraft make them a cornerstone of the Turkish Airlines medium- and long-haul

operations," said Temel Kotil, CEO of Turkish Airlines. "The new order will allow us to continue our strategy of growth and fleet renewal with an aircraft we know to be both reliable and profitable."

ICELANDAIR CONTEMPLATING BOEING 737 MAX



IcelandAir has plans to buy \$1.2-billion worth 12 Boeing 737 MAX aircraft, an order if finalised will add to the Icelandic carrier's current all-Boeing fleet of 23 757 passenger and freighter aircraft. The plan includes both the 737 MAX 8 and 9 variants as IcelandAir looks to expand its network to more destinations in Europe. IcelandAir's proposal for the 737 MAX is Boeing's latest announcement for its next generation single-aisle airplane following a large order from SilkAir in November this year.

DELTA BUYS STAKE IN VIRGIN ATLANTIC

Delta Airlines plans to buy from Singapore Airlines a 49 per cent stake in Virgin Atlantic for \$360 million. Singapore bought its stake in 2000 but it has been dissatisfied with the returns. The deal will provide Delta with enhanced access to Heathrow Airport, one of the world's busiest hubs, where take-off and landing rights are limited because of high demand and restricted capacity. British Airways dominates Heathrow with control over 53 per cent of the slots, followed by Lufthansa of Germany, with 5.6 per cent and Virgin with 3.3 per cent. American and United each have 2.3 per cent. New York, where all major airlines are battling to attract high-paying passengers, is the top international destination from Heathrow. Delta has a strong partnership with Air France-KLM that serves many European destinations, but it is not a strong contender in the London market.

✤ BUSINESS AVIATION

VISTAJET TO COME TO INDIA

The world's leading luxury charter jet company VistaJet, a Swiss chartered plane operator, plans to set up a marketing team in India to

APPOINTMENTS

GULFSTREAM

Gulfstream Aerospace Corporation has appointed Allan Stanton as Regional Vice President for Sales in the Middle East.

CAE

CAE has named Rob Lewis as Vice President for Global Business Aviation, Helicopter and Maintenance Training.

BOEING

Effective December 2012, Boeing has appointed Pratyush Kumar as President of Boeing India succeeding Dinesh Keskar.

MITSUBISHI AIRCRAFT CORPORATION

Mitsubishi Aircraft Corporation has appointed Hideo Egawa as Chairman/ Chief Executive Officer with effect from January 1, 2013.

tap into a base of around 200 high net-worth individuals and corporate houses who do not own jets. This is part of its wider strategy to focus on high net-worth individuals and companies in emerging economies. With its unique business model that makes aircraft available within 24 hours for its clients, it is betting big on the important shift in world trade that is moving now from Western to Eastern economies. VistaJet will not station their planes in India but would fly their planes into India within 24 hours of a request made. In India there is a need for long-range flying for corporate houses as they are now striving to be globally competitive.

VistaJet has placed the largest order in business aviation history when it ordered 142 aircraft from Bombardier in a deal worth \$7 billion. This includes firm orders for 56 high-end business jets for \$3.1 billion at 2012 list prices which consists of 25 Global 5000, 25 Global 6000 and six Global 8000 jets. The option for another 86 includes 40 aircraft each of Global 5000 and Global 6000 and six Global 8000 planes. Deliveries of the aircraft will commence in 2014.

HAWKER BEECHCRAFT EYES MIDDLE EAST MARKET

Hawker Beechcraft (HBC) is seeking to exploit the potential for growth in the Middle East business aviation market that is driven by an increase in demand for special mission aircraft. As per the company, in recent years there has been an increase in interest for surveillance aircraft in the Middle East, with customers requiring turboprop aircraft

EVENTS CALENDAR

AAAE AVIATION ISSUES CONFERENCE

6–10 January, 2013 Fairmont Kea Lani Hotel, Maui, Hawaii http://events.aaae.org/sites/130101/index.cfm

AIRCRAFT INTERIORS MIDDLE EAST

22–23 January, 2013 Dubai World Trade Centre, Dubai, UAE http://www.aime.aero

MRO MIDDLE EAST

22–23 January, 2013 Dubai World Trade Centre, Dubai, UAE http://events.aviationweek.com/current/ mme/index.htm

AERO INDIA 2013

6–10 February, 2013 Air Force Station Yelahanka, Bengaluru, India *http://aeroindia.in*

NBAA LEADERSHIP CONFERENCE

12–13 February, 2013 Hilton Austin Hotel, Austin, Texas, USA www.nbaa.org/events/leadership/2013

INDIAN BUSINESS AVIATION EXPO

19–20 February, 2013 Grand Hotel, Delhi, India www.miuevents.com/ibae2013

AUSTRALIAN INTERNATIONAL AIRSHOW

26 February–3 March, 2013 Avalon Airport, Geelong, Australia www.airshow.com.au/airshow2013/ index.html

ABU DHABI AIR EXPO

5–7 March, 2013 Al Bateen Executive Airport, UAE www.adairexpo.com

for oil spill detection, anti-piracy, fisheries protection and other surveillance purposes. The Middle East is a key area of focus for HBC and surveillance and reconnaissance is becoming increasingly important to protect national interests here," said Dan Keady, Senior Vice President of Special Missions at Hawker Beechcraft. Despite the sluggish global economy in recent years, deliveries of business aircraft to customers in the Middle East increased by 132 per cent between 2007 and 2011, when compared to the period 2002 to 2006. Saudi Arabia and UAE together took delivery of 108 business aircraft during that period, accounting for nearly half of all business jet deliveries in the region.

EASA CERTIFICATION FOR GE ENGINES The European Aviation Safety Agency (EASA) has granted engine type certification for GE Aviation's new H75 and H85 turboprop engines. The new engines are variant's of GE's H80 engine, designed for

the agricultural, commuter, utility, and business turboprop aircraft. China Aviation Industry General Aircraft Company recently selected the H85 engine to power its new five-seat Primus 150 business jet.

→ MAINTENANCE, REPAIR AND OVERHAUL (MRO)

EMBRAER EXPANDS DUBAI SERVICE CENTRE

Embraer is expanding the authorisation scope of its aircraft service centre ExecuJet Middle East as an authorised Embraer Service Centre at Dubai International Airport. The centre is now authorised to perform line maintenance on the Lineage 1000 ultra-large jet and for base maintenance on the Phenom 300 light jet. "Company skill, combined with the existing Embraer onsite stock of spare parts available at their facilities in Dubai, already provides our Phenom 300 and Legacy 600/650 customers with comprehensive support in the region. In addition, the inclusion of Lineage 1000 line maintenance capability gives our customers a further option in the Middle East region for this model," said Pedro Paiva, Vice President, Customer Support and Services at Embraer. Embraer's Dubai service centre is the second maintenance facility in the Middle East to be authorised to provide service for the Lineage 1000.

BOMBARDIER'S BUSINESS JET SERVICE CENTRE

Bombardier has boosted its service network in India by adding a second aircraft maintenance facility in New Delhi through its partner Air Works India which has been named a Line Maintenance Facility (LMF) for Challenger 604, Challenger 605, Global Express and Global Express XRS business jets. The facility will complement Air Works' service centre in Mumbai, which has been operating since 2008. The New Delhi unit, located at the Indira Gandhi International Airport, features a maintenance hangar and altogether Air Works employs approximately 550 aviation professionals in India. With the new facility in New Delhi, Bombardier's authorised service facilities and LMFs for its business and commercial aircraft worldwide has grown to 58,

which are supported by nine of Bombardier's own service centres in North America and Europe. The company has also announced a new, wholly-owned facility to be opened in Singapore in 2013. Air Works is one of the leading independent providers of aircraft MRO services for business and general aviation customers in India from its 14 locations. It also has a UK subsidiary Air Livery with aircraft paint and refinishing facilities.

➔ INFRASTRUCTURE

PLANS FOR AIRPORTS IN UP GROUNDED Civil Aviation Minister Ajit Singh's plans for developing airports on his home turf in UP do not appear to be moving forward. The Minister had asked the Uttar Pradesh government to transfer airstrips at Meerut, Faizabad and Moradabad to the Airports Authority of India. He had also sought land from the state to develop facilities at Agra and Allahabad airports. However, there have been no development on these fronts because of alleged lack of support from the state administration. He claimed Airbus was also keen to set up maintenance, repair and overhaul facilities at Meerut. "Why is the local government not taking any interest? Even a small state like Chhattisgarh is promoting aviation," complained the Minister. "Development of aviation will only improve connectivity to Tier-II and Tier-III cities. It is vital for the economy."

Airports in Delhi, Mumbai, Kolkata, Chennai, Bengaluru and Hyderabad handle 70 per cent of the air traffic in India. Around 60 million passengers flew in 2011, up by 16 per cent over the previous year. However, growth of this sector has slowed in 2012.

REGULATORY

AUCTION OF PRIME-TIME SLOTS

As per official sources, prime-time flying slots, allotted to airlines to operate their flights to or from an airport, would soon be auctioned on an experimental basis to begin with. An airport slot is defined by IATA as a permission given by a coordinator for a planned flight operation to use the full range of airport infrastructure necessary to arrive or depart at an airport on a specific date and time. The decision to auction has been taken following complaints of partiality to some airlines, especially at busy airports like Delhi, Mumbai, Kolkata and Chennai, with all carriers clamour-

ing for prime-time slots at these airports. To begin with, prime time slots which have been allocated to an airline but are not being used due to capacity constraint or other reasons would be the first to be auctioned. It was, however, clarified that the auction route was not aimed at generating additional income for the government or airport operators but to ensure efficient use of airport infrastructure in a transparent and equitable manner.

NEW WING TO MONITOR FINANCES

The Civil Aviation Ministry is considering a proposal to set up a separate unit to monitor and analyse the financial position of airlines taking it out of the purview of the DGCA which will concentrate only on technical and safety aspects. The move is to put in place a system to pre-empt serious financial crises such as the one afflicting Kingfisher Airlines that led to the non-payment of salaries. Civil Aviation Minister Ajit Singh refused to divulge details, saying that it would be premature. Apart from financial analysis, the unit will analyse fares and yield management practices followed by airlines. The unit will put in the public domain details like the number of tickets sold in the various buckets of fares. The intention is not to regulate fares but to bring transparency. The data will be put up on the Ministry's website so that consumers know the number of seats being offered by an airline and the fare structure. Experts say the model being mooted by the Ministry is somewhat similar to that in the US, where the Federal Aviation Administration (FAA) is the safety regulator. The department of transportation functions like a financial regulator. If an airline is in financial stress, the FAA increases surveillance on it.

AIRCRAFT ACQUISITION COMMITTEE RECONSTITUTED

Civil Aviation Minister Ajit Singh has approved constitution of a new Aircraft Acquisition Committee (AAC), which will consider, examine and make recommendations on all proposals for providing air transport services and for permitting import or acquisition of aircraft for various purposes. The AAC, headed by an Additional Secretary and Financial Adviser as Chairman, has on the team, H.S. Khola, former DGCA, Chairman Airports Authority of India, the current DGCA, Commissioner Bureau of Civil Aviation Security and Joint Secretary (Domestic Transport). The AAC will examine applications/proposals from the perspectives of air transport capacity required to meet air traffic demand, safety, security, financial,

Appellate Tribunal Stays Mumbai Airport Order

The Airports Economic Regulatory Authority (AERA) Appellate Tribunal has stayed the unilateral and exorbitant penal parking charges imposed by the Mumbai International Airport Private Limited (MIAL) for general aviation aircraft in Mumbai. The stay order came following an application filed by the Business Aircraft Operators Association (BAOA) against MIAL. This is the first ever application before the Appellate Tribunal invoking its original jurisdiction.

The disputes arose as MIAL unilaterally decided to levy and impose exorbitant parking charges since July 1, 2012, without seeking any approval and sanction from the

commercial and other relevant aspects of the proposal to ensure orderly growth of air transport services. The AAC will recommend the operation of scheduled and regional air transport services, non-scheduled air transport services and acquisition of aircraft for training and private use.

→ TRAINING

ATR PILOT TRAINING CENTRE



The European Aviation Safety Agency (EASA) has granted EU-A0015 certification to the new ATR flight training centre at the Seletar Aerospace Park in Singapore. The EASA approval allows ATR to offer flight crew type-rating training programmes for pilots. ATR has 80 aircraft in its backlog for airlines operating in the Asia-Pacific region. "Increasing our customer support capabilities and services around the globe is a strategic priority for ATR. The certification of this new and unique training facility is an important step in growing our presence in Asia-Pacific region," said Lilian Brayle, Senior Vice President of Product Support and Services at ATR. The training centre will officially be inaugurated in December, the company informed.

regulator, the AERA. BAOA filed a detailed representation challenging the MIAL imposition on August 1, 2012, following which, various meetings and discussions were held between the regulator and BAOA. But as MIAL still continued to levy the penal parking charges, BAOA filed an application before the Appellate Tribunal and sought urgent interim relief. After hearing the parties, the Appellate Tribunal directed the parties to maintain status quo on the parking charges and directed MIAL to charge as per the Airports Authority of India charges for general aviation aircraft in Mumbai Airport. The next hearing is on scheduled on January 4, 2013.

→ AIRLINE NEWS

AIRLINE PERFORMANCE 2012

Low-cost carrier IndiGo has retained its position as the market leader among domestic carriers even as domestic passenger traffic grew 13 per cent in October 2012. Domestic airlines carried 4.56 million passengers in October against 4.02 million in the previous month, as high demand during holiday season arrested a five-month downward trend. IndiGo carried 1.27 million passengers in October 2012, commanding a market share of 27.8 per cent, up from 27.2 per cent in the previous month, when the airlines carried 1.09 million passengers. Air India also saw its market share grow to 20.8 per cent in October from 19.3 per cent in September, while the number of passengers rose to 9.49 lakh from 7.75 lakh in the previous month. In fact, Air India has been showing increase in its market share over the past six months rising from 16.2 per cent in May 2012 to 20.8 per cent in October 2012. For June, July, August and September 2012, market share of Air India was 16.8, 18.2, 18.2 and 19.3 per cent respectively.

JET AIRWAYS TO INDUCT ATR 72-600 Jet Airways will be the first Indian carrier to induct the new ATR 72-600 series turboprop aircraft into their fleet completing induction of five aircraft in March 2013. The Franco-Italian ATR 72-600 is an upgrade from the existing ATR 72-500 aircraft in the airline's fleet, and will be used for connectivity to smaller Tier-II & III cities. It will seat 68 passengers, up from 62 in the ATR 72-500, in an all-economy configuration. The ATR 72-600 is equipped with the latest navigation aids.





GETTING WINGS

Besides arrival of the first complete Learjet 85 aircraft wing, the fuselage for FTV2 has also successfully completed its integrity inspection

HE FIRST WING SHIPMENT for Bombardier Learjet 85 jet has arrived at the Wichita assembly line and is now in the process of being readied for mating to the fuselage of flight test vehicle one (FTV1).

Alongside the arrival of the first complete Learjet 85 aircraft wing, the fuselage for FTV2 has successfully completed its integrity inspection. Installation of the nose, bulkheads, floor, windshield and door surrounds are scheduled to begin in the coming days. Once complete, the main fuselage will be shipped with the aft fuselage to the final assembly line.

Wings for the complete aircraft static test article are expected

to arrive from Querétaro by the end of November as preparations for static ground testing continues. Elsewhere, the programme is soaring along as all system supplier safety of flight test rigs been commissioned.

"Seeing the wings arrive for our first Learjet 85 test aircraft is a wonderful moment. A moment that could not have happened without the hard work and dedication of every single person involved in this project," said Ralph Acs, Vice President and General Manager, Learjet. "This development programme is gaining ever more momentum as we tirelessly work towards first flight and first customer delivery."

(THINK INNOVATION)

Our commitment to ongoing investment in technology and product development provides Eurocopter customers with innovations in flight safety, reduced operating costs and improved environmental performance. How to make their copters that work better.





Thinking without limits

FIRST



DEBUT FLIGHT

Eurocopter's EC175 medium-sized twin-engine helicopter made its maiden flight

UROCOPTER'S EC175 HAS MADE its first flight. The maiden flight took place at Eurocopter's Marignane, France headquarters facility, with company pilot Augustin Dupuis at the controls. The company has confirmed the excellent performance of this next generation multi-role helicopter.

"With this first production series aircraft now airborne, the EC175 helicopter is a reality, and Eurocopter is very pleased to bring this new product in its civil range to the market," said Lutz Bertling, Eurocopter's President and CEO. "This first flight is the occasion to confirm our objective to develop in cooperation with our industrial Chinese partner, AVIC, the safest and best medium-sized rotorcraft, which also is a leader in terms of competitiveness, power efficiency and comfort. Following the success of Eurocopter's EC130 T2 and the EC145 T2, the EC175 is yet another example of our strategy to provide outstanding value to customers."

The company has announced performance figures that ensure the EC175's competitive edge. Its recommended cruise speed is 150 kts, 10 kts faster than the previous figure without affecting payload range, while the maximum cruise speed exceeds 165 kts, all at extremely low vibration levels.

Eurocopter's programme flight tests till date also have con-

firmed the EC175's excellent power performance including: hover out of ground effect (HOGE) at maximum take-off weight at 4,500 ft at ISA+20°C conditions; excellent one engine inoperative (OEI) hover performance, which ensures safety during hosting for search and rescue missions; extensive power reserve and helideck performance (PC1) at maximum take-off weight in ISA+20°C conditions—available with application of the latest certified version of Pratt & Whitney Canada's PT6C-67E engines.

The EC175 avionics extends the EC225's undisputed superiority of in-flight envelope protection, pilot assistance and situational awareness and includes the most innovative alerting and self-monitoring system. "Flying the EC175 is a fantastic experience," concluded Eurocopter Company pilot Dupuis. "The excellent avionics, power, speed and low vibrations levels make it a unique aircraft."

The first EC175 version to receive airworthiness certification will be for the highly-demanding oil and gas market. With the designed-in attributes that meet rigorous operating conditions for off-shore missions—along with its range and speed—the EC175 is the best choice to address all missions, including search and rescue, emergency medical services, public services, VIP and executive transport.



LOOKING FORWARD

Forming new cross-regional alliances with competitors for joint ventures, collaborative partnerships in R&D and assembling and testing new platforms, is likely to be the way forward

BY B.S. PAWAR



LOBAL HELICOPTER MANUFACTUR-ERS ARE facing a market that in many ways is at crossroads. A few months ago, market research reports had painted an almost perfect picture for the helicopter market. A similar optimism prevailed a few years ago when market trends for both civil and military helicopters that

in some ways are interlinked, were showing positive growth signs. The replacement cycle of the global ageing fleet and growing disposable income in emerging markets were fuelling growth.

However, the global financial crisis has considerably downgraded the market prospects for the next 10 years. Apart from reduction in the size of fleets and enhanced spending on research and development (R&D) in the regime of alternative and renewable sources of energy to reduce the over reliance on fossil fuels, the current financial context will certainly be the biggest challenge that leading original equipment manufacturers (OEMs) will have to overcome. While these perspectives may paint a bleak picture wherein the helicopter market appears more vulnerable than it seemed, the immediate consequences affect deeply the volume of scheduled platforms to be delivered, future opportunities and ultimately the challenges in the competitors market. Most of the market research forecasts were planning the end of the fleet replacement cycle by the end of this decade. However, in the light of the financial crisis, the researchers expect the current procurement programmes, both military and civil, to be significantly reduced and delayed, leading to postponement of the end of the replacement cycle to 2020 and deferring prospects of new procurement programmes.

Exceptions to this challenge are the Middle East and Asia Pacific regions that are for now minimally impacted. However, the slow down in the growth rate in the developing markets of India and China may spell a different outcome by the end of this decade.

The military sector that represents the larger segment of the helicopter market and has largely been sustaining the rotorcraft industry since 2008 is likely to begin to decline within a few years. On the other hand, the civil helicopter market, though still a bit moribund, has stabilised and is even showing some signs of growth particularly in the emerging markets such as Asia and South East Asia, where countries are improving their capabilities with regard to homeland security to include border control, surveillance, law and order as also thrust towards offshore energy exploration. The government segment is also likely to increase in unit numbers, not only because of upcoming armed forces reduction, but also due to the fact that homeland security is a growing concern globally. As a result, the military market share is expected to diminish by 4.6 per cent. The decreasing military segment is a challenge for the helicopter industry. The OEMs will have to adapt their production to a diminishing fleet size and more intense competition against other OEMs for smaller procurement programmes. Conversely, it potentially creates interesting investment opportunities in the civil segment across the commercial and governmental sectors in emerging markets of Asia Pacific region, including Brazil, Russia, India and China (BRIC) countries.

To add to the challenges imposed by the financial crisis, there is a shift in end-user requirements that compromises procurement volumes. Research indicates that in-demand military and civil sectors will increasingly focus on multi-purpose/multifunctional platforms, which will be most in demand for both civil and military end-users, since this range includes the most versatile and technologically advanced multi-role platforms.

Apart from technical considerations, end-users have expressed their requirements to the industry by mostly selecting intermediate and medium helicopters. Budget constraints will require

THE SLOW DOWN IN THE GROWTH RATE IN THE DEVELOPING MARKETS OF INDIA AND CHINA MAY SPELL A DIFFERENT OUTCOME BY THE END OF THIS DECADE

end-users to rationalise their fleet capabilities and optimise maintenance costs, so that the availability of the platforms is not compromised when it comes to delivering critical missions. Simpler fleet configurations would aim at generating operational and cost efficiencies, leveraging a responsive and integrated supply chain to support operations. However, modern intermediate and medium platforms are increasingly more complex to operate and maintain. OEMs should expect a growing demand from end-users for adapted maintenance facilities and training of personnel.

Considering the market opportunities stated above, traditional leading competitors such as Bell and Russian Helicopters are expected to maintain their positions in the global helicopter market. The American OEMs will continue to maintain globally their leadership for the next decade, mainly within the military field. Boeing and Sikorsky will have the most significant growth compared to other competitors due to important procurements in India and China. Russian Helicopters growth will remain steady, driven by a strong domestic market demand in Saudi Arabia, India and China. Other competitors, which include regional OEMs such as the Hindustan Aeronautics Limited (HAL), Korean Aerospace Industries (KAI) and Changhe Aircraft Industries, will progressively increase their market share during the forecast period. Similarly, the competitive landscape across the civil market will witness the growth of Eurocopter which has established a large distribution and maintenance, repair and overhaul (MRO) network, especially targeting maintenance activities across Latin America, South East Asia and Asia.

Among regional OEMs, the Korean Aerospace Industry (KAI) is developing the 'Surion' which is also known as the Korean Utility Helicopter in the eight-metric-tonne class.

Intended for the South Korean Army, the Surion has been selected by the South Korean Police for law enforcement duties and cargo transportation. The induction is scheduled to commence in 2014. It is interesting to note that Eurocopter is KAIs primary partner in the Surion programme—the two companies established a joint venture in May 2011 to market the helicopter for export beyond South Korea. In India, HAL is also active in the rotorcraft market and its product line features the advanced light helicopter (ALH) Dhruv which has a certified civil version. The company has delivered more than 100 Dhruvs since the helicopter entered service, with most going to the Indian armed forces. The Dhruv has been garnering increasing interest beyond India, with Latin America becoming a potential market for the helicopter.

The above forecasts could however change if the financial crisis were to get any worse with either the potential collapse of the European currency or the US Department of Defence Sequestration plan approval. Apart from a terrible impact on platform volume, this context could benefit state-owned regional competitors, such as HAL, KAI and Changhe Aircraft Corporation. Indeed, the leading regional OEMs, which represent almost four per cent of the global market, could significantly strengthen their positions as emerging global competitors. These OEMs are not only benefiting from the market trend in favour of more affordable platforms based on unit price, they also benefit from the perception of low-cost manufacturing. The pricing tends to look artificially lower since manufacturing is in many cases subsidised, as illustrated by the example of HAL Dhruv. These two factors could increase the market size of the original competitors, while Western OEMs tackle the ongoing financial pressures.

This explains why leading OEMs are currently exploring new business strategies to limit the impact of the helicopter demand slow down and the regional OEMs aggressive market posture. While American OEMs are facing restrictions due to the defence budget cuts, European OEMs settled in the Eurozone need to take drastic measures to stay ahead of the Euro debt crisis. Unless alternative solutions are explored, these circumstances might prevent European OEMs from increasing their market shares at a pace that they would have planned for. Nonetheless, from a global perspective, leading OEMs would have to strongly assess their targets, as emerging markets are experiencing lower market growth than expected, especially in Latin America and Asia-Pacific, where markets are also heavily reliant on global financial stability. The common fear about Chinese market speculations are concerns that must be taken into account. Leading OEMs have to carefully consider that major regional competitors are also looking at expanding their networks by potentially building new partnerships.

Finally, it is in the best interest of OEMs to consider the joint approach strategy to widen their portfolio and invest in advanced R&D. This should protect their liquidity and potentially keep away financial and liquidity risks. Forming new cross-regional alliances with competitors for joint ventures, collaborative partnerships in R&D and assembling and testing new platforms, is likely to be the way forward. This strategy not only offers to diversify the choice of available currencies and hence contractual stability, but also is a warrant of liquidity and solidarity against financial volatility.

THE BEST & THE WORST

In India, civil aviation has the potential to create a revolution similar to the one seen in mobile telephony. This is possible with the right vision, roadmap, regulatory framework and relentless focus on quality and cost.

BY AMBER DUBEY



N THE MID-NINETEENTH CENTURY, Charles Dickens in his novel *A Tale of Two Cities* had described the situation before the French Revolution as, "It was the best of times; it was the worst of times". More than a century and a half later, this quote fits well to draw a narrative about India's civil aviation sector. It is the worst of times because the sector is reeling with several challenges. Bleeding airlines, falling passenger and cargo traffic, rising fares, high airport charges, frequent strikes and worried financiers have grabbed headlines in the last few months.

It is also the best of times. The situation has gradually led to a consensus within the government and most stakeholders that there is an urgent need for fundamental policy changes. It has been realised that the aviation sector which is a major facilitator of economic growth and employment generation cannot be left in such a volatile disposition. Some of the recent policy decisions by the Ministry of Civil Aviation (MoCA) are in line with this realisation. The untapped potential of the sector can be gauged from the fact that India's air travel penetration (domestic traffic divided by total population) stands at five per cent. It is negligible compared to the United States and the European Union at 230 per cent and 150 per cent respectively. Even among the Brazil, Russia, India and China (BRIC) countries, India is far behind Russia, Brazil and China having 50, 40 and 20 per cent respectively. KPMG believes that the unconstrained traffic potential for 2011-12 could be nearly 290 million as compared to the actual number of 162 million. To realise this true potential, progressive policies and a collaborative approach is required between the government, the industry and the public at large.

AIRPORTS. There has been a significant augmentation of airport infrastructure in the last five years with the passenger handling capacity rising from 72 million to 233 million. Although passenger traffic is projected to have a negative growth this fiscal, it has a

compound annual growth rate (CAGR) of 13 per cent during the last decade. In anticipation of such a trend, significant investments would be required for construction of new airports, expansion and modernisation of existing airports, improvements in connecting infrastructure (road and metro) and better airspace management. As per estimates, Indian airports would require an investment of ₹65,600 crore during the Twelfth Five Year Plan (2012-17), of which around ₹50,000 crore is being expected from the private sector.

Significant challenges that confront this industry today are:

- Policy and Regulations: A stable, transparent, predictable and investor-friendly regulatory regime with a mechanism of time-bound resolution of issues is necessary for attracting investors. The recent decision of the government to disallow airport development fee (ADF) for Delhi and Mumbai airports from January 1, 2013, jolted everyone. It may be tough for the airport operators to bring in fresh equity and debt in these difficult times. Passengers may also have to shell out more in terms of higher user development fee (UDF) charges if the ADF is abolished. Such issues need to be deliberated on before a final decision. The number of airports and aeronautical services which fall under the Airport Economic Regulatory Authority (AERA) need to be rationalised. Nowhere in the world does an airport tariff regulator handle 15 airports and aeronautical services.
- Innovative Funding Mechanisms: Lenders are being increasingly cautious when issuing long-term debt to airport operators. Financial support, especially for Tier-III and Tier-IV airports is critical. Following ideas can be evaluated:
 - Allowing greater external commercial borrowings (ECBs) for the sector.
 - Allowing airport companies to issue tax free infrastructure bonds.
 - Facilitating ADF for pre-funding of airports. This reduces the returns that need to be provided to airport developers and hence helps keep tariffs down.
 - Creating an Aviation Infrastructure Development Fund (AIDF) to provide viability gap funding to airports and airlines serving Tier-III and Tier-IV cities
- Facilitation by Government: This would help in swiftly clearing new airport projects which require a large number of institutional clearances. The delays at Navi Mumbai International Airport are a case in point. The proposed National Investment Board (NIB) may help. A successful example of such facilitation is Terminal 3 at the Indira Gandhi International Airport (IGIA), Delhi, where the National Facilitation Committee (NFC) under the Cabinet Secretary played a key role. Support from the state governments is also critical. This would come in the form of multi-modal connectivity, utilities, state security and lower tax on aviation turbine fuel (ATF).

AIRLINES. Indian domestic passenger traffic has grown with a CAGR of 15 per cent during last five years and now all the domestic carriers, except GoAir, also fly on international routes. Despite this significant growth, apart from IndiGo, all other airlines are reeling under losses and have large debt. Kingfisher Airlines' licence has been suspended and Air India is being supported by ₹30,000 crore of taxpayer's money. The recent decision of the government to allow foreign direct investment (FDI) by foreign airlines in the sector is extremely positive and related activity may

be seen in the next few months either through some stake sales or incorporation of new airlines.

There are many structural issues plaguing this industry:

- **Rationalisation of ATF:** The high cost of ATF (45 to 55 per cent of an airline's operating cost) is a formidable challenge for the financial health of airlines. Despite being an input fuel, ATF is subjected to sales tax as high as 28 to 34 per cent which renders it nearly 60 per cent costlier than its price in competing hubs such as Dubai, Singapore and Kuala Lumpur. To offset the high costs, the government has allowed direct import of ATF. This may not really work for want of ATF transportation network. What really needs to be done is that the government needs to notify ATF under the 'declared goods' category with a uniform application of sales tax of four per cent all over the country. This will result in significant benefit to the airlines and help expand the passenger base.
- The 5/20 Rule: The mandatory and unilateral restriction on Indian carriers of having 'five years of operational experience and a 20 aircraft fleet' before being allowed to operate on international routes is discriminatory. This rule should be reconsidered, particularly in the absence of similar restriction in other countries. Else nothing prevents an Indian carrier to get registered abroad and start flying into India from day one.
- **Bilateral Rights:** The government has taken a good reform measure by opening up bilateral rights to all the domestic carriers in India. Earlier an unwritten right of first refusal resided with Air India. This is a welcome step and all efforts should be made to ensure that Indian carriers utilise the full quota of seats available to them on international routes.
- **Regional Connectivity:** Most of the current traffic is at Tier-I & Tier-II airports. The next wave of growth would come from Tier-III and Tier-IV locations. Airlines must be supported by way of fare subsidies at such airports till the time traffic reaches a reasonable level. Creating an Essential Air Services Fund (EASF) to support air access to Tier-III & IV locations is one such option. This could be on similar lines as the Airport Improvement Programme (AIP) in the US or the India Infrastructure Project Development Fund (IIPDF) that is used to support other infrastructure sectors in India. The fund would facilitate regional connectivity and enhance traffic flying into metro airports also.

AIR CARGO. Although India's air cargo throughput has grown with an impressive CAGR of 10 per cent during the last decade, the current level of 2.3 MT for 2011-12 is extremely low for the world's fourth largest economy. It is lower than the cargo handled at airports at Hong Kong, Memphis, Shanghai, Incheon and Paris. The air cargo sector in India has shown negative growth during the last fiscal and this trend is projected to continue for this year. It is not just due to the sluggish economy but also due to complicated regulatory procedures and inadequate adoption of technology. A mix of short-term and medium-term actions is required to make India an international cargo hub:

• Facilitate Development of Air Freight Stations (AFS): AFS can be effectively used to reduce congestion at the airport premises by permitting faster transfer of cargo to or from the customs notified AFS. Though notified by the Ministry of Finance, AFS are not operational yet. The barriers preventing establishment of AFS should be removed and Customs and BCAS should be directed to issue required clearances.

- Ensure 24 x 7 Customs Operations: There is no plausible reason why Indian Customs should operate only for one shift in the cargo area while operating on a 24 x 7 basis in the passenger terminal. Customs duty from cargo is far higher than that in the passenger terminal. In August 2012, the PMO mandated 24 x 7 Customs operations at four airports, Delhi, Mumbai, Chennai and Bengaluru, on a pilot basis for a period of four months. The authorities should consider expanding 24 x 7 Customs operations to other airports as well. The Customs Housing Agents (CHA) need to be encouraged to expand their staff strength to derive full benefits of the Customs 24 x 7 operations. This will significantly reduce the large dwell times observed in India.
- Standardise and Simplify Trans-shipment Procedures: A significant low hanging fruit for Indian airports is the cargo trans-shipment opportunity. Trans-shipment cargo which constitutes as high as 30 to 50 per cent of total volumes handled by some of the leading airports is negligible in the case of Indian airports. One reason for this is that Customs and BCAS policies for trans-shipment are restrictive in nature. There is an urgent need for liberalisation of policies and procedures for trans-shipment operations.

MAINTENANCE, REPAIR AND OVERHAUL. The maintenance repair and overhaul (MRO) industry in India is at a nascent stage and has tremendous growth potential. India has the potential to be a MRO hub due to the growing aircraft fleet, location advantage and availability of technical talent. Due to discriminatory tax policies, Indian MRO players have to suffer an additional tax burden of nearly 40 per cent over foreign MROs. These are in terms of import duties, value added tax (VAT) and service tax.

This has led to a peculiar situation. Most Indian carriers prefer to fly their empty aircraft to other MRO locations such as Dubai, Singapore, Malaysia and Sri Lanka since it still works out to be more cost-effective than carrying out repairs in India. There is an urgent need for rationalisation of this anomalous taxation policy that has only hurt India's MRO industry. We have managed to 'export' the economic activity and the jobs that are generated thereof.

The reform measures required are as follows:

- The government should consider providing a 10-year tax holiday and subsidised land to encourage MRO facilities.
- MRO should be given 'deemed export' status to pass on related tax benefits and thus help prevent flight of business abroad.
- The government should incentivise airlines to consider setting up their dedicated MRO hubs in India through three-way joint ventures with MRO service providers and airport operators.

SKILL DEVELOPMENT. The supply of skilled manpower including pilots, technical staff and ATCOs has not been able to match the growth in Indian aviation. With passengers and aircraft fleet likely to triple by 2025, the need to augment skilled manpower supply is immediate. There are reports that the Ministry of Civil Aviation (MoCA) is planning to set up a National Aviation University which would impart all aspects of aviation training under one roof. This is an excellent step and its formation must be expedited through the public-private participation (PPP) route. It should be run professionally by experts in their respective fields.

FDI IN INDIAN AVIATION SECTOR

oreign Direct Investment (FDI) up to 40 per cent in the domestic airline sector in India was permitted by the government as far back as in the year 2000. This privilege was not available to foreign airlines either directly or indirectly. Some airlines, specifically Kingfisher Airlines, had been lobbying with the government for a change in the policy. However, it was only after years of dithering that on September 14, 2012, the Indian Government finally cleared the proposal for airlines based abroad to invest up to 49 per cent in India's domestic carriers.

Under the policy announced by the government, the ceiling of 49 per cent investment from abroad includes both FDI and foreign institutional investment (FII). Foreign airlines would have to obtain approval of the Foreign Investment Promotion Board (FIPB) as also will be required to obtain security clearance from the Home Ministry prior to investing in a domestic airline. As per Minister of Civil Aviation Ajit Singh, the new policy on FDI in aviation sector will encourage use of smaller aircraft to connect Tier-I, Tier-II & Tier-III cities with metros.

It is generally believed as also claimed by the government that investment by foreign airlines will bring in the much needed funds and expertise required by the domestic airline industry. However, some experts opine that foreign investment alone cannot solve the problems of the Indian airline industry. Other than the need for funds, there are other more serious problems afflicting the airline industry. The most acute problem is the high cost of aviation turbine fuel (ATF) which accounts for 45 per cent of the operating cost of Indian carriers whereas for international carriers, ATF constitutes only 20 per cent of the operating cost. In India, ATF is priced approximately 60 per cent higher than international prices owing largely to the high rates of tax levied by both the Central and state governments. Unless this is corrected, FDI alone may not be of much help. •

CONCLUSION. In summary, the key actions should include the following:

- ATF to be notified as a 'declared good'.
- Stable, transparent, investor-friendly regulatory policies to encourage greater private sector investments in airports.
- Facilitation by government in swift clearances for new airports.
- Innovative funding solutions such as AIDF and EASF to support air connectivity to Tier-III & Tier-IV locations.
- Revision of the 5/20 rule for allowing international operations for Indian carriers.
- Air cargo reforms by way of growth of AFS, 24 x 7 Customs operations and facilitation of trans-shipment cargo.
- Ten-year tax holiday and deemed export status for the domestic MRO industry.
- Establishment of world-class aviation training facilities.

In India, civil aviation has the potential to create a revolution similar to the one seen in mobile telephony. This is possible with the right vision, roadmap, regulatory framework and relentless focus on quality and cost. There is no option anymore.

-The author is Partner and Head-Aviation, KPMG India

NEED FOR NURTURING

Experts believe that regional airlines would be workable only in the long-term when at least 200 cities across the country have functional airports. That would create enough space for everyone. However, the AAI estimates that traffic from non-metro airports is already growing twice as fast as that from the metros and may hit 45 per cent of the total within just five years.

BY JOSEPH NORONHA

T IS A FAMILIAR early morning sight at many far-flung airfields in the developed world, especially the United States. Travellers wend their way to a waiting plane lugging their personal belongings. They are prepared to rough it out to a degree because this is only the first short leg of a long journey to a distant destination. The plane, generally a jet, but increasingly a turboprop, has about 50 seats. The regional carrier that operates it is unfazed if some seats remain empty because it has a code-sharing agreement with a major airline and is assured of a fixed profit upon completion of each flight. Code sharing allows major carriers to competitively outsource their flying even while maintaining their brand identity.

Who benefits? Code-sharing agreements streamline the flying experience for the traveller and provide seamless service to small, remote communities. Consumers benefit from lower ticket prices and enjoy more air travel options. From the point of view of the major airlines, a steady stream of passengers is available to feed their national and international networks. Operationally, the practice allows individual carriers to specialise in a particular aircraft and follow a single business model, which greatly simplifies things. Although the system has recently come under some strain, it generally works. That is why in the US for instance, regional airlines serve a whopping 681 communities and 70 per cent of those communities are only served by regional carriers. And across the globe, regional airlines are the only means by which hundreds of towns and small cities are connected by air.

COLD START. It is a different story in India where dedicated regional operators are conspicuous by their absence. The government's ambitious August 2007 policy on scheduled regional air transport operations has practically drawn a blank. Some experts blame its strict fleet size norms and other stringent preconditions for this sorry state of affairs. In the absence of regional airlines, it falls to the mainline carriers to operate a handful of flights to regional airports. Sadly, commercial aviation remains fascinated by big-city lights and almost 70 per cent of domestic passenger traffic passes through the six metros. Even exquisite tourist and religious spots such as Mysore and Puducherry find it difficult to attract scheduled air services.

Regional aviation has of necessity to be undertaken by smaller aircraft since just a third of the country's airports can accept even narrow-body aircraft like the Airbus A320 and the Boeing B737. A big incentive for regional flights in India is that aircraft weighing up to 40,000 kg are supplied aviation turbine fuel (ATF) at sales tax of just four per cent against an average of 24 per cent for heavier aircraft. Similarly, landing and parking charges are waived for aircraft that carry up to 80 passengers. However, these concessions are applicable to all airlines, not just regional carriers. Therefore, large and small airlines end up competing on the same routes. Before long, the small regional carriers who cannot afford to undercut their big rivals will be priced out of the market.

THE WRONG WAY. Coercion comes easy to officialdom. Having failed to encourage small regional airlines to launch services, the Indian Government appears to be gearing up to compel the existing airlines to increase their flights to smaller cities. The deeply unpopular route dispersal guidelines already oblige the major carriers to operate to the Northeast region, Jammu and Kashmir, Andaman and Nicobar, and Lakshadweep islands; but these have met with mixed success. The latest proposal is to include more cities in Category II routes so as to give the airlines a wider choice of less attractive destinations to fly to. However, major airlines that operate large aircraft on international routes may not find it easy to downscale and operate smaller aircraft to out-of-the-way destinations. And forcing airlines to service airports that do not fit in with their business plan is hardly helpful.

SpiceJet, which earlier had only Boeing B737 jets, is the main carrier currently bringing air connectivity to smaller cities such as Hubli and Belgaum with the help of 12 Bombardier Q400 NextGen turboprop aircraft. Jet Airways has 20 ATR 72-500 turboprops suitable for regional operations. But IndiGo and GoAir have the all-Airbus A320-200 fleet and cannot use short runways. They are also fairly uneconomical on short-haul routes. Air India's forays into dedicated regional operations (via the erstwhile Vayudoot and some Indian Airlines flights) were a failure. Kingfisher Airlines seems ready to go under. How can these carriers boost regional aviation?

The government's 'solution' is a new aircraft-acquisition policy intended to 'persuade' the airlines to buy smaller planes and increase flights to smaller cities. However, the airlines naturally are reluctant to sacrifice their freedom to purchase aircraft of their choice. Why should any carrier be forced to compromise its economical singletype fleet and go in for a mix of aircraft which multiplies operational, maintenance, training and administrative problems? Sensing the emerging opposition, the government now says that the recently

EXPERIENCE FROM AROUND THE GLOBE SUGGESTS THAT REGIONAL SERVICES OFTEN NEED NURTURING BY SUBSIDIES OR TAX BREAKS



reconstituted Aircraft Acquisition Committee would merely ask an airline to provide a firm business plan before ordering new aircraft so as to not let it fall prey to overcapacity. It sounds good in theory. But does the government have sufficient expertise to evaluate an airline's business plan? If it had, its own carrier, Air India might not have been in such dire straits today.

A HELPING HAND HELPS. At the heart of the regional aviation riddle is the fact that inter-state connectivity is much better than short-haul intra-state connectivity. Aviation infrastructure can improve much faster when local governments chip in to hasten land acquisition procedures and expedite the plethora of necessary clearances. Some enlightened state governments are indeed beginning to offer tax concessions and financial support in an effort to encourage entrepreneurs to launch operations within their states.

Experience from around the globe suggests that regional services often need nurturing by subsidies or tax breaks. In the US, the Essential Air Service subsidy was introduced in 1978 to help regional airlines provide services to small, isolated and far-flung communities that no major airline wanted to touch. In India, the creation of an Essential Air Services Fund (EASF) for subsidising



loss-making routes connecting smaller airports is under consideration. The aim would be to auction commercially unviable routes that attract lower passenger numbers for three to five years till they reach some level of maturity.

Regional airlines can succeed only if based on the low-cost, low-fare model and by operating as feeder services to the mainline carriers. On low-density regional routes, it makes sense to deploy turboprops rather than jets, especially in the prevailing situation of high fuel prices. Hence, official policy needs to be directed at incentivising small companies to induct turboprops and operate them on short-haul routes, while the bigger ones operate jets on longer routes. Both should be encouraged to cooperate on different routes rather than compete on the same ones by various methods, including code sharing.

The Ministry of Civil Aviation is reportedly working on a sensible plan to allow non-scheduled carriers to enter into codeshare agreements with scheduled airlines. The non-scheduled ones could act as feeder services for the scheduled carriers. However, success depends on the willingness of the charter operators to rework their economics and join such a venture.

WILL IT WORK? The Indian Government has reportedly hired a consultant to identify the factors that are inhibiting the growth of regional air connectivity in different parts of the country and a report is expected soon. Hopefully, it will bring out the urgent need for creating low-cost terminals at least in the smaller cities across the country.

Right now, there is a desperate shortage of capital. Funding a viable regional airline of sufficient size where economies of scale kick in, could take up to ₹150 crore. Who would be able to put up that kind of money without adequate support from banks? The banking sector is spooked by its unhappy experiences with Air India and Kingfisher Airlines and is understandably reluctant to burn its fingers with the aviation sector all over again. Companies with licences to start regional services are also finding it difficult to rent planes since lessors are extra cautious after their nightmarish experiences with Paramount Airways and Kingfisher Airlines.

Some experts believe that regional airlines would be workable only in the long-term when at least 200 cities across the country have functional airports. That would create enough space for everyone, major airlines as well as regional carriers, to operate in. Still, the Airports Authority of India estimates that traffic from non-metro airports is already growing twice as fast as that from the metros and may hit 45 per cent of the total within just five years. According to the International Air Transport Association, Indians travel on an average of just 0.1 times per year compared with 1.8 times in the US. The potential for growth, therefore, is huge. But regional aviation is like a tender sapling that needs favourable conditions to flourish. Rather than compulsion, it needs care and nurture.



CONNECTIVITY ENHANCED

Both metro and non-metro airports are going to add to the growth story of India. In the next 20 years, there is going to be a quantum jump in the projected traffic—four times in passenger and six times in cargo traffic. Both metro and non-metro airports will be critical enablers of the economy. State governments will need to play a more active role in encouraging airport development and air connectivity if they wish to drive investments and growth.

BY R. CHANDRAKANTH



IRPORT TRAFFIC IN INDIA is growing by leaps and bounds. In 2010, it had touched 143 million passengers and the projections by the Centre for Asia Pacific Aviation (CAPA) are that it would go past 450 million by 2020. While most of the passenger movement would be accounted for by major metro-based airports, the

role of the non-metro airports, specifically regional airports will

get accentuated in the coming years as the country goes in for 'enhanced connectivity'.

There have been moves both by the government and the private sector to reach out to remote and inaccessible areas of India's mainland in the hope that air connectivity to the unserved or underserved regions would boost business opportunities, tourism and general prosperity in these areas. The Airports Authority of India (AAI) believes that air traffic from non-metro airports would increase from the present 30 per cent to 45 per cent in the next five years. The Union Government is encouraging private-public partnership (PPP) with the state government as co-promoters and has a policy of identifying regional hubs on the basis of origin-destination surveys, traffic demand and the requirements of airlines.

In its bid to build air connectivity across the nation, the AAI during the Eleventh Five Year Plan period spent about ₹12,500 crore, upgrading and modernising 35 non-metro airports including Agra, Ahmedabad, Amritsar, Bhopal, Jaipur, Pune, Goa-most of these in Tier-II cities. Regional airports are looking at both Tier-II and Tier-III cities. The intent of the government is clear to go for pan-India air connectivity. The Rohit Nandan Committee made several recommendations, one of which is mandating scheduled domestic carriers to comply with Route Dispersal Guidelines (RDG) of 1994. The purpose of RDG was to fulfil the social obligation of the government to provide air connectivity to areas which are not commercially lucrative to the airlines. The committee had expressed concern that despite the implementation of RDG, air connectivity has been largely confined to very few airports and that too concentrating on routes connecting to the state capitals. As airlines resorted to cherry picking of routes, the committee recommended development of new tools to achieve the twin objectives of fulfilling the social obligation of ensuring air connectivity to remote regions without adversely impacting the economic viability of the airline industry.

Though at present, regional airports which serve traffic within a relatively small or lightly populated geographical area, have not made substantive impact on the aviation sector; these do have enormous potential. Aircraft such as turboprop regional airliners, business jets and helicopters are going to increase in numbers in India and for them to become operationally viable, regional airports are the answer as metro airports are not only congested but also operationally cost prohibitive. REGIONAL AIRPORTS WHICH SERVE TRAFFIC WITHIN A RELATIVELY SMALL OR LIGHTLY POPULATED GEOGRAPHICAL AREA HAVE NOT MADE SUBSTANTIVE IMPACT ON THE AVIATION SECTOR

that they serve. From the aviation perspective, tapping these underserved and unserved areas could translate into substantial number of passengers. With induction of regional airliners such as Bombardier and Embraer (20 to 100 seat category), the hinterland could be easily connected, which in turn would mean creating business opportunities; boosting employment, moving cargo and tourism growth.

FIRST REGIONAL AIRPORT UNDER PPP. Another player who has ventured into this field is Regional Airport-Holdings International Ltd. (RAHI), a joint venture between IL&FS Transportation Networks Ltd and Comet Infra-Developments Pvt Ltd. RAHI has Greenfield airport projects in Gulbarga and Shimoga, both in Karnataka, and these are nearing completion. According to Umesh Kumar Baveja, Chairman RAHI, the company's corporate objective is to develop 99 airports by 2025. In the next five years, RAHI will invest in over 15 projects related to aviation infrastructure and services with a value exceeding ₹3,000 crore.

The Gulbarga and Shimoga airports are being developed on the PPP model with the concession period being 30 years and extendable by another 30 years. As the first two regional Greenfield airports in India to be operational under the PPP model, RAHI estimates that these can serve up to 1.5 million passengers a year. RAHI has plans of operating 20- to 50-seat aircraft in order to



DARING PRIVATE PLAYERS. With the government providing a platform, it is

for the private players to take the initiative and stake it out as return on investments are going to take time as regional airports have to be nurtured and developed on a slightly different revenue model. A few entrants have forayed into the regional airport infrastructure development and the foremost one is Reliance Airport Developers Private Limited (RADPL). Reliance is the largest private non-metro airport operator in the country. RADPL has designed, developed and is managing five airports in Maharashtra namely Nanded, Latur, Baramati, Yavatmal, and Osmanabad, all on a 95-year lease with the company. SpiceJet and GoAir operate flights connecting Nanded and Latur to Mumbai, Nagpur and Delhi. RADPL aims to develop these airports to boost the regional economy and thereby increase its footprint in the aviation sector.

Regional operators believe that the smaller airports will work as catalysts for economic and social growth in the region

ATB

5- 171) is a envali jar of the Embrany E-Jat family

MANY BUSINESSES HAVE STARTED LOCATING THEIR OFFICES IN TIER-II AND III CITIES DUE TO LOWER COST OF OPERATION IN THESE AREAS. REGIONAL AIRPORTS WILL HELP BOOST THESE BUSINESSES WITH THE CONNECTIVITY THEY BRING.

respond to specific demand generated by each location. However, to reduce the burden on passengers for a specific period, RAHI has submitted a proposal to the state government for subsidy on passenger fares for flights operating from Gulbarga airport.

RAHI is planning to utilise the airport city-side for commercial use by the creation of a geo-specific industry cluster to empower local communities and contribute to economic growth. An integrated horticulture and floriculture hub has been proposed at Shimoga. The airport itself will be spread over the area of 137 hectares and the city side will occupy the remaining 128 hectares. In Gulbarga, the project developer is setting up an integrated aviation hub with an International Aviation University. The airport itself will be spread over the area of 148 hectares and the city side will occupy the remaining 129 hectares.

While these airports are looking at enhanced economic activity, the Government of Puducherry is keen on boosting tourism and has given in-principle approval to Super Airport to develop a Greenfield airport in Karaikal. The Ministry of Civil Aviation and defence authorities too have cleared the project.

LAND COST AND CONGESTION. Airports in Tier-II and Tier-III cities are going to be a reality, considering that land costs

are shooting up in cities. Airports have massive land requirements and will have to fight with other users of land for what will be an increasingly expensive asset. In fact, the cost of land may ultimately impact the viability of many airport projects. India's rapid urbanisation is having a cascading effect. With large-scale migration away from small towns and rural areas, there is enormous pressure on the cities. Congestion in large city airports is one and high infrastructure regeneration cost is another. There is a latent demand for regional airports and connectivity with increased disposable incomes.

Another noticeable trend is that many businesses have started locating their offices in Tier-II and Tier-III cities due to lower cost of operation in these areas. Regional airports will help boost these businesses with the connectivity they bring. Also, around the airports, industries which are time-sensitive like manufacturing and logistics will come up. There are

business opportunities to be tapped. On the aviation side, regional airports can serve general aviation; maintenance repair overhaul (MRO) locations, hangars, aviation training, air cargo centres and aero sports. On the non-aviation side, it can help develop warehousing, cold chains, agro tourism and retail chains.

Away from the congested cities, it can provide uncongested airspace, ample aircraft parking space, proximity to agriculture, industrial and manufacturing centres. However, it is fraught with challenges of birth and development. There would be limited traffic to begin with and there would be high costs of maintaining mandatory infrastructure and services such as air traffic control, security and meteorology.

According to Vidya Basarkod, who was formerly with RADPL, the advantages are low capital expenditure (low cost, functional terminals, no baggage carousels/aerobridges/ferry buses); low operational expenditure (limited and multitasking staff, low-cost heating/air-conditioning); cost sharing of mandatory services like security, air traffic management and meteorology by the Central and state governments.

State governments will need to play a more active role in encouraging airport development and air connectivity if they wish to drive investments and growth. The classic example of a state government playing a proactive role is that of Kerala which initiated the Cochin International Airport Limited (CIAL), the first PPP airport project in India. A large proportion of the initial funding was raised from retail investors. While CIAL cannot be classified as a regional airport (it has substantial international and domestic traffic), it nevertheless has been a model to be replicated and the Kerala Government is now looking at Kannur for airport development.

All said and done, both metro and non-metro airports are going to add to the growth story of India. In the next 20 years, there is going to be a quantum jump in the projected traffic, four times in passenger and six times in cargo traffic. Both metro and non-metro airports will be critical enablers of the economy.



REGIONAL VIS-À-VIS LOW-COST

Low-cost carriers have become the norm in India with legacy options, especially classes other than economy, used only by the rich tourists, the excessively affluent Indian still waiting to buy his first business aircraft, or executives travelling at company or government expense

BY A.K. SACHDEV

HE YEAR 2003 WAS perhaps the most significant in the history of Indian civil aviation. Scheduled airlines crossed the ticket pricing Rubicon with low-cost pioneer Air Deccan leading the charge. The unquestioned reign of legacy carriers was over. Three mega mergers later i.e. Air India with Indian Airlines, Kingfisher with Air Deccan and Jet Airways with Air Sahara, there is no airline company that does not have either all or a significant proportion of its passenger operations and revenue template based on the low-cost model.

While IndiGo, SpiceJet and GoAir work essentially on the lowcost concept, the grouping of legacy carriers i.e. Air India, Jet Airways and Kingfisher Airlines, have low-cost components which are steadily increasing in extent. The low-cost model should, by all logic, have gravitated towards Tier-II and Tier-III cities, with a resultant boost to regional aviation. However, the peculiarities of the Indian civil aviation regulatory regime have kept the regional carriers from thriving. Under the same regime, low-cost carriers have become the norm in India with legacy options, especially classes other than economy, exercised only by the rich tourist, the excessively affluent Indian still waiting to buy his first business aircraft, or the freeloader travelling at company or government expense. Is there a connect between the low-cost model and regional aviation or do they exist on different non-intersecting planes? DILEMMA OF THE LOW-COST MODEL. In a way, the current smothered state of Kingfisher Airlines is a vindication of the low-cost model. Dr Vijay Mallya had been a voluble critic of the low-cost model, constantly flaunting his "King of Good Times" rendering of an airline. Indeed, his publicly iterated stance of studied derision on low-cost carriers left him no latitude to adapt to the changing situation in India. Continual warnings of impending doom failed to elicit the rational response that aviation watchers anticipated from him with their toes curled. In my opinion, the point of no return came when in November 2011, Kingfisher was rapped on the knuckles publicly for withdrawing its services to the North-east region without explicit permission from the Ministry of Civil Aviation. As a staged response, Kingfisher declared that it would revisit its operational model but in fact did nothing tangible to cut costs. Had Kingfisher, even at that stage, decided to embrace the low-cost model, it could have avoided its present ignominy and financial predicament.

Some aviation experts compellingly argue that there is no low-cost carrier operation in India. This is because there is no low-cost terminal anywhere in India, the cost of aviation fuel/ oils/lubricants is the same for 'legacy' and 'low'-cost carriers and the airport, landing, terminal and navigation charges are differentiated only by the aircraft weight and not whether the operator claims to be low-cost carrier or not. The carriers themselves, for the reasons stated above, prefer to call themselves low fare carriers in contrast to low-cost. Meanwhile the passenger corpus in India is roughly divided into three segments. The first i.e. the most affluent, is disdainful about low-cost or low fare options and revels in its loyalty to the legacy carriers or their present avatars. The second is the other end of the spectrum and is preoccupied only with the price tag of the air tickets he buys and even cost difference of a hundred rupees can sway his decision.

However, it is the third category that is relevant to furthering the low-cost model, the value seeker. It is this class of air traveller that has the time and the inclination to compare air ticket costs, and what each ticket entails or excludes by way of seating, entertainment, baggage rules as also food and beverages. That is not to say that the offer of a free snack on board is guaranteed to beguile this class of customer. After all, the longest flight in India is around two and a half hours and with careful planning, one could forego the onboard snack, provided the trade-off was a hefty slice off the airfare one was paying. Coming back to the low-cost carrier, it is unlikely that the Indian establishment is ever going to look at providing any kind of concessions or discounts to some airline merely because it purports to charge its customers less for air travel than its legacy competitors. Nor is it to be expected that some mark-downs will come in the way of airlines looking at regional airports to add to their network.

The existing Route Dispersal Guidelines (RDGs) stipulate that a percentage of the flights flown between metros would be flown on routes connecting Tier-II and Tier-III cities. There is a further requirement to operate a percentage of flights to remote locations. The RDGs are aimed at ensuring that a minimum proportion of scheduled traffic is dedicated to the unattractive routes.

AVIATION EXPERTS COMPELLINGLY ARGUE THAT THERE IS NO LOW-COST CARRIER OPERATION IN INDIA

INDIGO, SPICEJET AND GOAIR WORK ESSENTIALLY ON THE LOW-COST CONCEPT

'Regional' airlines are those that can connect to only one metro (except in the Southern region where three metros exist) to nonmetros. As of today, Air Mantra is limping on as the only 'regional' airline in India.

ELITIST REGIONAL CARRIER. By definition, Paramount, at least in its early days, was a 'regional' airline. Thiagarajan, a Cessna pilot who himself was fascinated by the airline business, launched Paramount Airways in 2005 with non-metro destinations in South India, primarily because his family business Paramount Textiles was located at Madurai. In another oddity, he decided to run all flights with only business class. These two decisions were at quite a contrast with the prevailing mood. So while the low-cost model was catching the *aam aadmi's* attention and the metros were the favoured airline destinations, Paramount flew "business" and it flew "regional". Starting with one aircraft, Paramount built up to five in 2007. Paramount's Embraer aircraft were exempted from paying landing and parking fees as they belonged to the exempt category of smaller aircraft. Moreover, as against 28 to 33 per cent sales tax on fuel, Paramount had to pay only four per cent. The airline became profitable in the tenth month of its launch only. But in 2009, Thiagarajan took another contrarian decision. When all others were cutting down operations and fleet strengths, he decided to invest \$1.3 billion (₹6,500 crore) in fleet expansion over the next three to five years. He had plans to add 15 short haul regional jets and ten medium-haul, wide-bodied aircraft to its existing fleet of five Embraer jets. The aim was to break out of 'regional' aviation and spread out over India so that he could fly international in 2010. The rest is history. Paramount came to a grinding halt and is yet to recover from its collapse, although rumours about a rejuvenation can be heard in soft whispers sporadically. One of the reasons why Paramount eventually lost out was the use of long haul small commercial jets for short flights wasting a high proportion of fuel on take-offs and landings and burning up extra fuel due to the lower flight levels associated with short flight segments. The other reason, debatably, was the deviation from the low-cost model.

SPICEJET – A VIABLE MODEL. SpiceJet has displayed a great strategic vision in its business model development. While it has steadfastly and loyally clung to the low-cost model in its approach to its passengers, thus keeping the cost of operation manageable, it has realised the potential of the 'regional' market. Its decision to induct the Bombardier Q400 to serve on short routes to small towns and cities is one that is bound to yield generous dividends which are expected to far outweigh the disadvantages of having more than one aircraft type on an airline's fleet. It is possible that when all 40 of its Q400 aircraft are in place and the regional vacuum exploited through its low-cost model, SpiceJet may set off an envy chain reaction that will encourage IndiGo and GoAir also to look at regional jets or turboprops to augment their existing single aisle fleets. Meanwhile, the lowcost model appears to be sturdily ensconced on the Indian civil aviation scene. 💵



ENCOURAGING GROWTH

Irrespective of whether or not the government realises the need for nurturing business aviation, the latter will grow because business aircraft operators are realising the contribution of business aviation to the growth of their businesses. It is just a question of time before the establishment wakes up to this fact.

BY A.K. SACHDEV

VER THE LAST DECADE, airline travel in India has become more affordable, has reached the *aam aadmi* and its elitist image has been considerably diluted. However, business aviation has continued to be a stepchild of the Indian civil aviation industry. Traditionally perceived as having been sired by "the rich and the famous",

business aviation has been envied, begrudged, resented and maltreated. Speaking at an aviation meet organised by the Confederation of Indian Industry (CII) in New Delhi in July 2012, Tony Tyler, Director General and Chief Executive Officer, International Air Transport Association (IATA), hit the nail on the head when he said, "It is time for a grand plan to build India's aviation future and thereby strengthen the Indian economy. For lack of a better description, what is needed is an 'India Inc' approach to manage interests for the widest possible benefit." He was referring to the need for coordinated roles of the Ministries of Civil Aviation, Finance, Tourism, Commerce, Environment and Petroleum as also some others towards exploiting the full potential of aviation to benefit the national economy. From the civil aviation industry's perspective, the current disposition is that the parent Ministry i.e. the Ministry of Civil Aviation and the other ministries concerned with civil aviation, have solely and collectively drafted policies which are unfavourable and sometimes even hostile to the industry. Unfortunately, out of all segments of the Indian civil aviation industry, business aviation continues to be the worst afflicted.

BUSINESS AIRCRAFT OPERATORS' ASSOCIATION. Up to the year 2011, two separate organisations were working towards furthering the interests of business aviation, the Business Aviation Association of India (BAAI) and the Indraprastha Aircraft Aviation Association (IAAA). The BAAI had been formed in 2004 with the aim to take up issues concerning the business aviation community. In 2010, the IAAA was formed with similar objectives. In a significant development, the two have merged to form a new organisation, the Business Aircraft Operators' Association (BAOA)

which is doing a great service to the business aviation sector. In its endeavour to spur the growth of business aviation, it is working overtime to dispel the idea that a business aircraft is no more than a status symbol whose only role is to carry business dons and their families around. BAOA is doing its best to constantly highlight the impact of time-saving travel of executives, not necessarily of the big houses but also those of medium and small businesses, on growth of individual businesses with cumulative effect on the national economy, directly and indirectly.

REGULATORY FRAMEWORK. One of the areas where BAOA's endeavours have started bearing fruit is that of the regulatory framework for business aviation that has notably been a weak area. Regulations for scheduled operations formulated by the Directorate General of Civil Aviation (DGCA) are adequate and robust. But for non-scheduled operations and general aviation, of which business aviation is a sub-set, the regulatory provisions tend to be adaptations of those drafted for scheduled operations. BAOA's efforts have led to some changes in the existing Civil Aviation Requirements (CARs) but a lot more needs to be done in that direction. As it is not possible for BAOA to selectively pursue business aviation interests exclusively, a serendipitous and happy spin-off from BAOA's labour is that non-scheduled operations and the rest of general aviation have also benefited. Some of the draft cars on DGCA site for public views are a result of the work by the BAOA with DGCA functionaries.

LACK OF DEDICATED INFRASTRUCTURE. Infrastructure woes are a double whammy for business aviation. At most airports, the facilities available for business aviation aircraft are inadequate. The metros are especially hostile to a business aircraft desirous of extended parking time while the senior company executives travelling by the aircraft complete their assigned mission. If the airports had their way, they would like the aircraft to fly an empty, wasteful leg to another airport just to park and return only when its passengers are ready for departure, thus defeating the whole purpose of a quick reaction business aircraft to meet a busy executive's rapidly changing requirements as dictated by the compulsions of his business. If the aircraft is planned to stay on, the entailed expenses for parking, are exorbitant. Indeed, the BAOA is seeking legal action against the Mumbai International Airport Limited (MIAL) for the arbitrary and high parking charges imposed on business aircraft. Even the lounge facilities, if these do exist, come at a cost that pinches every business operator. The base end operators are stung by the high cost and the high-end ones who should normally be able to afford it, also find the financial burden somewhat unreasonable on account of by their high frequency of operations.

Dedicated terminals with hangar space and parking bays for business aviation aircraft are unheard of in India. The BAOA has often stated that there is a need to revisit the infrastructural requirements as the Operations, Managements and Development Agreements (OMDAs) for most private airports state that there cannot be another airport within a 150-km radius of an existing one. Fixed base operators (FBOs) are more or less non-existent. Wherever a semblance of an FBO does exist, the dispensation is monopolistic and very high priced for the aircraft operators due to the high royalties exacted by them. Maintenance, repair and overhaul (MRO) for business aviation likewise costs a lot because of the high rates of value-added tax (VAT), service tax, customs duty and royalties to the airports they are located at.

THE TIME HAS COME WHEN THE INDIAN GOVERNMENT NEEDS TO ORDAIN A FOCUSED, INTER-MINISTRY STUDY ON THE BENEFITS OF BUSINESS AVIATION TO THE NATION AND ITS ECONOMY

HIGH TAXES. The taxation policies where other ministries have a role to play also need to be revisited if business aviation is to thrive and in turn, make its contribution to the national economy. Aviation fuel needs to be brought under the 'declared goods' category so that the extortionate rates of sales tax/VAT levied by some states can be brought down to a reasonable level that permits business aviation to prosper. The import duty on business aircraft, almost all of which are purchased abroad, is also unreasonable as it is around one fourth of the price of the aircraft itself. This is in sharp contrast to the 2.5 per cent import duty on aircraft imported for non-scheduled operations.

IMPERATIVE NEED FOR ACTION. The foregoing is not a comprehensive list of what holds back the growth of business aviation in India. However, it serves to highlight the fact that the luxury label affixed to business aviation needs to be ripped asunder before its potential to affect national economy can be perceived. This exercise has to commence from the establishment downwards. The economic benefits that accrue from business aviation connectivity, its impact on local economies by way of employment and infrastructure, and its capacity to indirectly contribute to the healthy growth of GDP, need to be acknowledged and understood so that India can move on to the next step, a concerted effort to encourage and support business aviation. According to the DGCA website, India has 250 aircraft of all types registered for private use. This figure does not include aircraft that are registered under non-scheduled operator's category to avoid the hefty custom duty on import for business use. However, given the fact that almost all global aircraft manufacturers have established their presence in India and are busy trying to sell their aircraft, growth in numbers is a foregone conclusion. This is especially so in view of the growing affluence of our business community which has 55 billionaires and a large number of high net-worth individuals (HNI) and companies. Admittedly, the rise in number of business aircraft has not been impressive so far, but the BAOA expects that to change in the coming years.

Irrespective of whether or not the government realises the need for nurturing business aviation, the latter will grow because business aircraft operators are realising the contribution of business aviation to the growth of their businesses. It is just a question of time before the establishment wakes up to this fact. There are available reports on studies carried out abroad which certainly seem to point to the need for nations to officially sponsor the growth of their business aviation as one important step amongst others, towards the growth of national economy. Perhaps the time has come when the Indian Government needs to ordain a focused, inter-Ministry study on the benefits of business aviation to the nation and its economy.

ROUTE TO THE COCKPIT

As long as the Indian skies are not populated with sufficient general aviation aircraft, the training status of aspirant airline pilots can be safeguarded either by large flying training institutes such as IGRUA or by following the MPL route

BY V.K. VERMA

ISHANDLING OF A LANDING in 2011 by a co-pilot of an airliner brought pilot training in civil aviation in India into focus. It also led to the exposure of dubious methods adopted by some in connivance with flying schools and obliging officials of the Directorate General of Civil Aviation

(DGCA) to find an easy route to highly-paid jobs as airline pilots, and subverting the system in the process.

LICENCE TO FLY. All over the world, regulatory systems have almost similar licensing requirements. A pilot aspirant first obtains a Student Pilot Licence (SPL) to commence training. Thereafter, with 40 hours of flying experience, he gains a Private Pilot Licence (PPL) which allows him to captain an aircraft without passengers. The next step is Commercial Pilot Licence (CPL) with 200 hours flying experience. A CPL allows a pilot to carry passengers. This is the bare minimum experience and qualification for entry into an airliner cockpit as a pilot.

In the West, general aviation is well developed with thousands of small aircraft operating in this category. CPL holders employed initially in general aviation, move to airlines after 1,500 hours of flying. Thus pilots flying an airliner in the West would generally have a minimum flying experience of 1,500 hours. In India it is different.

TRAINING FOR CIVIL AVIATION. In India, growth of civil aviation was centred around its state-owned carriers: Air India and Indian Airlines. Training for civil pilots was provided by flying clubs run by state governments. These were small establishments meant to train only for PPL but in fact trained pilots up to CPL as well. As there were virtually no general aviation aircraft in the country, CPL holders went directly to the state-owned airlines.

Former Prime Minister Rajiv Gandhi, an Indian Airlines pilot, realised that flying clubs lacked professional institutionalised training and good aircraft. Thus, he along with Captain Satish Sharma, conceptualised a government-run institution that would impart quality flying training for entry into airlines. This led to the birth of Indira Gandhi Rashtriya Uran Akademi (IGRUA) in 1986 at Fursatganj, Rae Bareli, in Uttar Pradesh. IGRUA was provided the Trinidad TB-20, the best and the only basic trainer aircraft then to have an auto-pilot and retractable undercarriage. These were purchased along with simulators. For multi-engine experience, essential for an aspiring airline pilot, two state-ofthe-art Beechcraft King Air C90A, along with full-motion simulator, unheard of for training aircraft in those days, were acquired. IGRUA trained 20 pilots every year which was sufficient for the national carriers. Soon, IGRUA blossomed into an excellent flying training institution with selected trainees, good residential and

training infrastructure and competent staff. The national carriers preferred IGRUA as their recruitment platform.

BOOM IN AVIATION. Around 2005, with the emergence of new carriers, the demand for pilots grew manifold. However, as the limited capacity of IGRUA could not be expanded quickly to meet the rapidly growing demand, pilot aspirants went abroad in large numbers to obtain CPL Also, flying clubs mushroomed in the country to cash in on the opportunity. However, very soon, the bubble burst and today, there are around 3,000 CPL holders who are unemployed.

STATE OF FLYING SCHOOLS. To understand what went wrong, let us look closely at the state of the flying clubs. Most of these have only three to four single-engine aircraft. There is acute shortage of Chief Flying Instructors in the country and knowledge base of instructors at these schools is suspect. Trainees generally number 10-15; there is no ground school, no Air Traffic Control (ATC), no dedicated airspace, no simulators, no landing/navigational aids and some operate in uncontrolled airspace.

The atmosphere resembles coaching centres with inmates sporting temporary/contractual/commercial demeanour with overpowering desire to make money. As aircraft are few, the management can ill-afford a mishap. Therefore, trainees never get to fly solo. A safety pilot always on board, yet the sortie is logged as solo. Confidence and quality become casualties and civil aviation suffers.

Is the flying club business model financially fatal? It would appear so. Competition forces a low fee structure. Clubs housed at the Airports Authority of India (AAI) airfields face high rentals. Price of fuel continues to climb. As if these are not stifling enough, a service tax burden has been imposed with retrospective effect. Only a very large organisation relying on high volumes and government support can produce a sustainable financial model. With finances failing, short-cuts, cheating and scams all surfaced and that is what hit the headlines some time ago.

IGRUA–AN EXCEPTION. What then makes IGRUA tick? It conducts a national entrance examination annually at five major cities. The examination has three steps—a written test, an interview and a 'go/no go' pilot aptitude test. This ensures that only the trainable with pilot aptitude and attitudinally endowed are

CONFIDENCE AND QUALITY BECOME THE MAJOR CASUALTIES AND CIVIL AVIATION SUFFERS

enrolled. It has its own airfield, three hangars, ATC, fire services, fuel farm, electrical back-up, runway lights, VOR/DME, ILS, its own airspace and a flight-line of 25 aircraft, including two multiengine aircraft. The fleet has 16 glass-cockpit equipped DA 40 and 42 aircraft from Diamond of Canada. In addition, it has five older French Socata TB-20 and four Zlin aircraft of Czech origin. All these are backed by simulators. , IGRUA currently has 20 flying instructors on its roll, a mix of ex-Indian Air Force and civilian instructors. It has a well-equipped ground school with five instructors who conduct 450 hours of classroom training up to ATPL level. The hostel can accommodate up to 250 trainees including 40 girls housed separately. Sports facilities include a football field, two squash courts, two indoor badminton courts, a gymnasium, two volleyball courts and cricket ground. In addition, table tennis and billiards are also provided. The construction of a swimming pool and an auditorium is under way. The entire Akademi is networked through fibre-optic lines. Under CAE management, IGRUA is a part of its global CAE Oxford Avia-



tion Academy network. As such, professional, learning material abound. Not for nothing has IGRUA earned the epithet of being the 'IIT/IIM of Aviation'.

RECIPE FOR QUALITY TRAINING. The sheer scale of infrastructure at IGRUA differentiates it from the other schools. The very air in IGRUA exudes "professionalism". In aviation training, size and scale do matter, calling for heavy investment in infrastructure and training aids. Financial viability thereafter is contingent on the volume of output. What Indian civil aviation needs is four to five well equipped large-size IGRUA clones with large campus spread across the length and breadth of the country. Simply change the regulations. Make it mandatory for schools to have at least eight aircraft, if they intend to impart training for CPL. Schools with fewer aircraft should be limited to training for PPL. The government should encourage merger of smaller flying clubs and aid them with suitable training aids. The model selected could be public, private or public-private partnership. Reduction in the number of schools would improve financial viability. Besides, DGCA with its perennial shortage of staff will be able to monitor quality of training.

SCHOOLS WITH FEWER AIRCRAFT SHOULD BE LIMITED TO TRAINING FOR PPL

The other weak link is the quality of instructional staff. There is no institution to train flying instructors for civil aviation. As IGRUA has the wherewithal, it must be given the task to conduct courses for grooming instructors. Only when this is done professionally, will the overall standard of pilot training reach the desired level. For quicker results, there is one more option. There are a fair number of Air Force Flying Instructors who seek premature retirement with their second career option focused at the airline cockpit. Many of them are willing to join civil flying training schools for short duration to regain currency in flying. There is the need to provide them the necessary clearance by DGCA and the Ministry of Civil Aviation and enrolling them as instructors for durations that are mutually beneficial. They will inject professionalism and help raise training standards.

MULTI-CREW PILOT LICENCE. In the absence of a large fleet of general aviation aircraft in India, wherein CPL holders can build the requisite experience, there is yet another methodology which can provide an alternative solution. It is called the Multi-crew Pilot Licence (MPL). CPL training focuses on the pilot to be a confident captain of a small aircraft; MPL methodology focuses on airliners from the start. This scheme is based on the multi-crew concept i.e. two pilots together flying an airliner, managing multiple systems. A very large segment of MPL training is carried out on simulators. Initially, the pilot is taught basic flying in an aircraft and then trained in different types of simulators moving on to advanced full-motion simulators and bigger aircraft. Simulator training also has flying training spaced in between. There is very little solo flying in this syllabus as it is visualised that the airliner will always have multi-crew configuration. Fundamentals of airline piloting are ingrained at the outset as the training is conducted with two pilots in the cockpit in an airline environment. Such a system has been approved by many regulators the world over, such as in Canada, Germany, France, Holland, China, Australia and Malaysia.

Air Asia in the neighbourhood has adopted the MPL programme wholeheartedly. Another aspect of the MPL programme is that the airline carries out the selection of aspirants and then sponsors their MPL training. Thus, the employment of MPL pilots is guaranteed at the end of the programme. With its focused training, this methodology will infuse higher levels of quality and safety in the civil aviation of countries that are yet to develop in their general aviation segment.

In India, a presentation on MPL programme was made at the DGCA in April 2010 by CAE, the leading training and simulation giant. It was also attended by stalwarts from the airlines. However, there has been no progress so far. For MPL methodology to succeed, first the regulator must accept the programme. Only this can prompt the airlines to foray into it. Unconfirmed reports indicate that IndiGo amongst Indian carriers has shown some interest in the MPL programme. As long as the Indian skies are not populated with sufficient general aviation aircraft, the training status of aspirant airline pilots can be safeguarded either by large flying training institutes such as IGRUA or its clones or by following the MPL route. \square *—The author is the Director of IGRUA*

THE REFORMATION

There is unanimity amongst aviation experts and the government about the issues shackling the Indian aviation industry—lack of aviation infrastructure, exorbitant airport charges and high ATF prices due to state tax levies. However, the truth is that there has been lack of strategic planning and policy execution to address these impediments.

BY SHRINIWAS MISHRA

HE HISTORY OF THE Indian civil aviation industry speaks volumes about vision, priorities and execution capabilities. Back in 1912, India was one of the first few countries to foray into commercial civil aviation. Although the population and economy have grown manifold since then, the country has not been able to realise its rightful place in the world in the domain of civil aviation. While aviation hubs have emerged in the region, both in the Middle East and in South East Asia, despite its strategic location, India has lagged behind primarily due to lack of strategic planning and a reactive approach in formulation and implementation of policies.

LIBERALISATION SAGA. Post-nationalisation in 1953 through to the late 1980s, the Indian air transport industry was highly regulated with airports and airlines being government-owned monopolies. Indian commercial aviation needs were served by two inefficient state-owned carriers. However, in the early 1990s, domestic air services were deregulated as part of the reforms following economic liberalisation. The Air Corporation Act of 1953 was repealed to remove government monopoly and enable private airlines to operate scheduled services. Private operators emerged on the scene and soon cornered 30 per cent domestic market share. Thereafter, along with gross domestic product (GDP) and the middle class, India's domestic traffic too experienced unprecedented growth. However, following the entry of the first low-cost carrier (LCC) Air Deccan in 2003, the market dynamics changed dramatically. Today, private airlines account for about 75 per cent of the domestic passenger traffic with LCCs such as IndiGo and SpiceJet giving full service airlines (FSAs) a run for their money.

India has been cautiously pursuing liberalisation of its international services. Since 1990, air cargo services have been liberalised. After prolonged negotiations, the first Open Skies Agreement with USA was signed in 2005. In the airport sector, foreign direct investment (FDI) up to 100 per cent has been permitted since the year 2000. The government has been moving towards privatisation of the airport infrastructure, with handing over of the management of Delhi and Mumbai airports and commissioning of Greenfield airports at Bangalore, Hyderabad and Cochin. However, the tardy pace of liberalisation of the aviation sector has inhibited competition between the FSAs and LCCs as also among airports. There are still no low-cost airports for general aviation aircraft.

In the absence of low-cost terminals and low-cost secondary airports, it is difficult for LCCs to sustain the price differential with the FSAs. Now with Kingfisher Airlines grounded and the changed market dynamics with LCCs hiking fares in the face of rising demand,

the difference between the fares of FSAs and LCCs have narrowed considerably. The current state of Kingfisher and Air India has destroyed the competitive market, resulting in higher fares and drop in passenger traffic. While current market conditions are beneficial for the LCCs, passengers suffer due to lack of competition.

Till October 2012, foreign airlines were not permitted to invest in Indian carriers. However, the recent policy decision to permit foreign airlines to invest up to 49 per cent in Indian carriers is being projected as a panacea for the current woes of the industry. Although there are unconfirmed reports about the possible stake acquisition in Jet Airways and Spice Jet, it would be naïve



to believe that foreign carriers can be enticed to invest in Indian carriers under the prevailing uncertain business and regulatory environment. Besides many of the airlines in the world are struggling to remain afloat. As for Kingfisher, given its debt burden of ₹11,000 crore, loss of credibility and licence suspension, it would be a miracle to find an investor among airlines abroad.

Other maladies afflicting the sector are the price of aviation turbine fuel (ATF) and airport charges in India that are among the highest in the world. Compared to foreign airlines, for Indian carriers, fuel accounts for over 40 per cent of operating cost. Also, steep airport tariffs make airports such as Delhi and Mumbai the world's costliest. The depreciating value of the Indian rupee fur-

INDIA HAS LAGGED BEHIND PRIMARILY DUE TO LACK OF STRATEGIC PLANNING

ther compounds the financial mess the airlines are in.

Shortage of parking space and higher lease/tariffs at metro airports is a major disincentive for the growth of general aviation in India. A case in point is the Mumbai International Airport Limited (MIAL) which levies stiff penalties to privately-owned aircraft, registered outside Mumbai, for exceeding the usage of the parking slots beyond pre-determined hours. It is ironical that Mumbai, the financial capital of India, home to India's biggest industry houses and business magnates, is serviced by an airport which can hardly accommodate 25 privately-owned aircraft. General aviation in India, having its unique requirements and characteristics, has no dedicated regulatory framework or infrastructure. The current regulatory environment has many disincentives for general aviation and invariably their operational and infrastructural needs are often ignored. An important aspect critical to the growth of the aviation industry is the liberalisation of the mindset and thought process. In this context, a very pertinent question is whether the destiny makers and regulators of the air transport industry are in tune with the economic and technological changes? The present lack of credibility resulting from the prolonged Kingfisher saga, wherein the regulator and government's action/inaction, further accentuates the crisis of confidence in the Indian air transport industry. An analysis of the liberalisation process in India reveals that it is evolutionary and reactive rather than being a well-thought out and proactive policy.

COMPETITION. The airline industry, with a small number of companies and concentration of market, meets the basic characteristics of an oligopoly. In addition to the economic business dynamics, regulatory mechanisms along with the infrastructure issues are major entry barriers. As per the simple rule of demand and supply in a free and competitive market economy, growth in demand triggers increase in supply. However, in case of the aviation industry, capacity cannot be augmented in tandem with the demand since airports have a fixed capacity in terms of their ability to handle traffic. This capacity constraint invariably benefits the incumbents more than the late entrants as they are able to occupy airport infrastructure on a 'first come first served' basis. The shortage of slots, ground handling, terminal space and other services acts as barriers to entry for newcomers, especially since allocation is based on grandfather rights. The issue of slots is important for competition since the existent carriers may take advantage of their dominant position.

The growth of the Indian aviation industry is constrained by regulatory barriers inherent in the domestic air transport policy which constrain new entry and militate against competition. One such example is the grant of first right of refusal to Air India on a private carrier's application for international traffic rights. The result is that the company which is struggling to remain afloat and doesn't have the capability to operate new routes is able to dictate the expansion of other carriers. The paradox is that instead of benefiting Air India, this has mostly benefited the international carriers at the cost of domestic players. Also, the regulations governing minimum fleet size, equity requirements and route dispersal guidelines in respect of domestic, international and Gulf sectors, act as entry barriers. These rules strengthen the incumbent's position and are highly discriminative to the new entrants. It defies logic to put restrictions on the domestic carriers whereas these do not apply to international carriers. It is ironic that Indian carriers need to fulfil the condition of having operated domestically for five years and have a fleet of at least 20 aircraft to be eligible to fly overseas, whereas international carriers are not constrained by such rules.

Although the Indian aviation industry witnessed tremendous growth after the arrival of LCCs, growth potential in regional market is yet to be realised. If the current growth trajectory is to be augmented, it is very important that competitive forces must continue to operate in the system, especially catering to the regional markets. In the global aviation industry, there has always been consolidation wherein weaker and inefficient players are weeded out. Whereas, consolidation in the Indian aviation industry is resulting in routes rationalisation, consumers are bearing the brunt of rise in airfares post consolidation. With top players capturing larger market share, chances of cartelisation are also enhanced. Such attempts have been witnessed in the past. In 2005, a major attempt to collude in raising fares was nipped in the bud by timely intervention of the Competition Commission of India (CCI). There is suspicion of apparent collusion wherein after the Kingfisher fiasco, domestic fares dramatically rose similar to or more than those for international destinations in the Far East. Therefore, in the absence of proactive regulatory and oversight mechanisms, such attempts will continue to be made.

TIME FOR ACTION. The history of the Indian aviation industry doesn't suggest that deregulation has been deliberate and planned. Policy decisions seem to be either for short-term, individual-centric or reactive in nature to fix a problem after it has already escalated. How many would agree that the recent policy decision of the government to allow foreign airlines to own 49 per cent equity in the domestic airlines was dictated by real strategic national interests? Tragically, the nation is bogged down in debate with little follow-up action. There is unanimity amongst aviation experts and the government about the real issues which are shackling the growth of the Indian aviation industry. Every expert would point out to the lack of aviation infrastructure, exorbitant airport charges and high ATF prices due to state tax levies. However, the truth is that there has been lack of strategic planning and policy execution to address these impediments.

In the current economic slowdown, the flight of capital and rupee depreciation have resulted in higher fuel, aircraft lease and maintenance costs. There is an urgent need for the government to focus on the macro environment to make the aviation industry sustainable, competitive and consumer-friendly. However, considering the current economic and political uncertainty in the country, it would be a daunting task for the government to deny the state's revenue share on ATF, ensure a coordinated nation-centric aviation strategy amongst oil, commerce, finance, environment and aviation ministries, create low-cost airport infrastructure and rationalise airport and aeronautical charges. Plagued with inefficiencies and short-term decision-making, the industry is likely to be lurching from one crisis to another. In all likelihood, experts would continue to discuss in the media the same issues and peddle the same solutions. It will be 'a dream come true', if low-cost airports and LCCs coexist with their full service counterparts, the competition is fair and efficiency as well as innovation are the winners. Enough of preaching and debate, time for action now!

LIAISON SANS SYNERGY

If the Indian ATC persists in adopting a rigid and inflexible attitude in dealing with foreign aircraft, it will, in all likelihood, be relegated to being the 'pariahs' of the industry

BY S.R. SWARUP

OT MUCH HAS BEEN spoken, written or thought about the role air traffic control (ATC) plays in aviation. As a result, a component of aviation, which has an unparalled potential, lies unrecognised and untapped. To be fair, ATC as an arm of aviation has not received its due share of recognition at least in the Indian environ-

ment. By itself, it has the capability of altering the aviation envelope beyond the imagination of aviation 'think tanks'. ATC has three components, technology, human resources and procedural skills. A combination of the three can inject safety, comfort and confidence in the air much to the delight of pilots. Considerable time has been devoted to technology, procedures and training but only abroad. As in most other fields, the benefits of research have not touched the Indian aviation scene. Hence, the Indian airspace remains chaotic, noisy, relatively unsafe and turbulent.

Infrastructure, training and crew resource management, aid airline pilots in India to cope with the prevalent air traffic environment. However, the business aviation fraternity is handicapped by the absence of these conveniences. Unlike in the airline industry, business aviation pilots do not fly to the same destination day after day, at fixed times on the same route, operating out of the same stands into familiar airfields. Business aviation pilots confront new challenges on a daily basis. Flying at short notice, ever demanding passengers, new destinations, untimely depar-

tures, the absence of ground support, unfriendly regulatory environment and 'not-so-knowledgeable' managements make life adventurous for a business aviation pilot. Negotiating weather as also coping with maintenance and flying skills, is a given. In such a scenario where safety has a high premium and the cargo priceless, an efficient ATC can add oodles of comfort to a business aviation pilot.

DEPARTURE FROM MUMBAI. It

was a midnight departure for Neale from Mumbai. He and his crew of four had a long way to go in their Gulfstream 550—destination San Diego in the USA. But no sweat, as they were in the most modern corporate jet ever designed and endowed with every bit of technology ever invented. The crew had a total experience of 14,000 hours. The passengers, rich and famous, were in the safest



possible hands onboard the best possible machine. The take-off was scheduled for 0100 hours. The mild drizzle with passing showers posed no serious problem. They reached two hours ahead of scheduled departure. Experience had inculcated the wisdom that 'to be on time means you are already late'. Pouring over briefings and the computerised flight plans, the crew waited patiently for their rendezvous with customs and immigration. And then came the first of the hurdles.

The ATC had a shift change and hence a delay of half an hour at least. Patience is one of the virtues a business aviation pilot has in abundance. Delays are factored into the assembly time. Over a period of time, Neale and his colleagues had learnt that in India, almost everyone is out to sabotage the flight plan of a business aviation pilot. Navigating through them demanded high level of negotiating skills and patience. Next was the second bombshell. The ATC would like to see the Captain in person in the briefing. Time was running out. The customs were not in sight. The Captain could go to the ATC while the customs and immigration arrived. But that was not possible. The handler told them with glee. The 'infamous Indian bureaucracy' was at work and had just put its best foot forward. The ATC would like to see a 'General Declaration' and Passenger Manifest stamped by the customs along with the clearance form and the Captain in person.

It was pouring and the ATC was about 30 minutes drive in a car with speed governed up to 20 kmph. While Neale was busy

working out the time factor, his colleagues, Mike and Greg, were watching in bewilderment. Nowhere in the world had they seen such a high demand for a pilot by the ATC. While they could file a flight plan from Luton to San Diego online sitting in Mumbai, they wondered why they could not file a flight plan from Mumbai to London. More perplexing was the fact that while a domestic flight plan could be filed online, an international flight had to be filed manually and in person by the Captain.

Having surrendered to bureaucratic might, Neale trudged his way to the ATC in the rain along with an amused handling agent. There were no visible signs of welcome. Neale waited patiently. After a few moments, he was asked to enter some infructuous data into a register and sign for the weather and the communication briefings. A call from

SP'S AIRBUZ • ISSUE 6 • 2012 • 29

the handler told him that the passengers had reached the terminal. A polite request to the briefing officer and Neale was told he could leave. Neale sprinted in the rain and got into the waiting car. After another few minutes, the handler returned asking Neale if he could come back to the briefing since the 'briefing officer would like to know the 'entry' and 'exit' points and required another signature. Neale walked back patiently to the briefing in the rain. A good 10 minutes later, Neale was back in the car on his way to the aircraft. He managed to reach just after the passengers did.

A walk around the aircraft for external checks and Neale was in the cockpit. A thorough check of the cockpit and the flight plan took him 25 minutes before the crew was ready. Mike, the pilot on the right seat, asked for clearance from the delivery. And Neale got the shock of his life when he heard the flight plan was not in the system. A flurry of phone calls followed. Something sacred, called an Air Defence Clearance (ADC) number was awaited. Ex-Sergeant Thomas was roped in to help. Being an ex-Air Force 'Air Defence Safety Operator', he used his connections and obtained the ADC number in 10 minutes. Both the expat pilots were wondering what the excitement was all about. But then they had by now got more than a peep into the Indian 'red tapism'. In pouring rain, the Gulfstream 550 VT-BRS departed Mumbai on its 9,300 nm journey which incidentally involved a refuelling halt at Luton in London. The Indian bureaucracy had tried hard but the tenacious pilots had won the day.

A LESSON TO TAKE HOME. Date: June 28, 2012; Venue: Las Vegas International Airport. Neale and his crew had finished their checks and were waiting for the arrival of passengers who had requested Neale if he could fly low over the 'Grand Canyon' for an aerial view. Experience in flying the 'rich and famous' had taught Neale that a good corporate pilot never says 'no' to his passenger. Flight path to the 'Grand Canyon' required him to fly a track conflicting with aircraft approaching Las Vegas.

Neale and Mike waited with bated breath. The passengers had intimated that they had to catch a cruise boat at Fort Lauderdale, their destination. Hence time was of essence. Fortunately, the passengers arrived on time. The doors were closed with 25 minutes to spare. Mike asked for clearance. And then they were shocked. The flight plan was not in the system; hence they could not get a 'clearance'. A flurry of phone calls to the handler at Bengaluru followed. Time was at a premium. The passengers were all excited about flying over the 'Grand Canyon', but there was no flight plan. The handler in India insisted the plan was filed but the 'delivery' said it did not have it. Maintaining his calm, Mike changed frequency and asked the controller if he could take the plan verbally. The sweet and warm voice on the radio welcomed VT-BRS and asked for the route. And in precisely two minutes, the plan was in the system and Mike had the 'clearance'.

VT-BRS was up and away. The more demanding task was yet to come. At its peak, the McCarran International Airport at Las Vegas probably has more traffic than Mumbai. Expecting approval of a flight path against arriving traffic was beyond the expectations of the crew. A hesitant request was made. They got a reply that their request would be passed on. A few moments later they were pleasantly surprised, when the radar controller asked VT-BRS to change course. In the midst of heavy density traffic, the controller vectored VT-BRS over the 'Grand Canyon'. After confirming that the passengers had a good view, the radar controller wished the passengers and the crew a pleasant flight and put it back on the flight path. The aircraft landed at the destination on time and the passengers boarded their cruise ship as scheduled. Never before had the experienced crew of VTBRS witnessed such professional control. Despite the heavy traffic, the radar controller had gone out of his way to make the flight a pleasant experience for the crew and the passengers of VT-BRS. It was a lesson for the crew.

CONTROLLING: A MISNOMER. The crew of VT-BRS was introduced to two clearly contrasting styles of air traffic controlling. Two different cultures and attitudes—it is not to disparage one and extol the virtues of the other. There is clearly a need to identify the areas where the Indian system is lacking. For starters, the ATC fraternity needs to understand that even though they are controllers, their responsibility is to 'facilitate' not 'control'. The ATC occupies a very significant position on the safety ladder. Its role is vital for the safe flight of an aircraft. Hence it is imperative that the ATC fraternity holds the hands of the pilot community and helps them fly safe.

TIME FOR REFORMS. All good things need to have a beginning and often, imitation is better than innovation. What the Indian ATC environment lacks is not technology or manpower. The gap is in training, exposure and work culture. Fortunately, English is not alien to us. We need to expose our controllers to the work ethos abroad. This will usher in a realisation that the huge gap needs to be bridged.

Communication is important but more importantly, the correct message must reach the recipient. For this, it is essential that a controller speaks slowly, clearly and calmly. The airspace comprises operators of different nationalities speaking different languages. Indians have an inherent tendency to speak fast. Combined with regional accent, transmissions could be unintelligible to foreign pilots. The pilot in the approach phase is under high stress. Combine this with poor communication and it is a recipe for disaster.

Modern technology is meant to reduce the workload, both for the pilot and the controller. Indian airspace is the only one where the pilot still reports position after being identified by the radar. This increases the workload and complicates communication, significantly retarding safety. ADC numbers for domestic aircraft is an obsolete concept and needs review. Aircraft which have filed suitable flight plans cannot be delayed by state-of-the-art ATC for want of ADC.

Manual flight plans went out of fashion decades ago. It is ridiculous that in India, captains still have to go to the ATC. As mentioned earlier, in the pilot's experience, clearances can even be given verbally. One does not even have to write it down, leave alone go to the ATC. Communication officers and briefings are obsolete. There is a crying need for speedy reforms.

NEED FOR URGENT REFORMS. An efficient air traffic environment can be a great stress reliever for a pilot. It is not technology that we lack; as in every other field, we are beset with policy paralysis. Reforms or the lack of it thereof, in commerce or industry can delay or slow down growth. But in aviation, there is no time to procrastinate. Aircraft cannot hold in mid-air waiting for the regulator to act. Reforms are required urgently. The 'India Growth Story' notwithstanding, the global aviation fraternity, will shun Indian airspace. If the Indian ATC persists in adopting a rigid and inflexible attitude in dealing with foreign aircraft, it will, in all likelihood, be relegated to being the 'pariahs' of the industry.

FOR EMERGENCY SERVICES

In the West, HEMS takes off in three minutes after emergency call, thanks to dedicated regulations for emergency flights. This is yet to be achieved in India. HEMS are a crucial element in saving precious lives. All stakeholders must work together to take on this national challenge and social responsibility.

BY SP'S CORRESPONDENT

ELICOPTER EMERGENCY MEDICAL SERVICES (HEMS) are well established in Europe and Asia but are still considered an expensive tool for the affluent. However, with increasing awareness, more countries are beginning to appreciate its benefits. In India, where rural areas are hard to reach and cities congested,

emergency medical services (EMS) cannot be provided quickly enough. Here, annually 1.3 lakh people die and five lakh are injured in road accidents caused by poor infrastructure/transportation facility, lack of hospitals near highways and drunken/ rash driving. Over 80 per cent of victims do not get medical care within one-hour of the accident and 30 per cent die before they reach a hospital.

HELICOPTERS –A LUXURY? The cost of owning and operating helicopters, especially one equipped with medical equipment, is high. However, helicopters help save lives and actually reduce costs. In terms of time-saving, the efficiency of helicopters is not in doubt. In congested areas, journey time by road can be as much as eight times than by a helicopter. A study in Germany established the cost-efficiency of HEMS beyond any doubt. Researchers at Clark University tested the cost of HEMS versus ground units through a model that replaced the helicopter service with a hypothetical ground-based system. Assuming similar response time and staff, the ground network covering the same service area, required a budget twice that of the HEMS, with perpatient cost being 60 per cent higher.

HEMS-DESIGNED HELICOPTERS. Platforms for HEMS should have excellent visibility, energy absorbing seats, manoeuvrability, compact design, large cabin volume, excellent ground clearance of main rotor and protected tail rotor, modern instru-



ment panel and skid landing gear. Based on these requirements, Eurocopter, the world's leading helicopter manufacturer, is designing helicopters especially for HEMS. Eurocopter has achieved great success in this segment, delivering two out of every three helicopters for HEMS in the last decade. Its light twinengine models, EC135 and EC145, have been especially popular for HEMS today. Their unique features are two large side and rear doors facilitating loading of stretcher, flat floor for loading of oversize equipment and easy adaptation to customers' needs. Eurocopter has delivered its 1,000th EC135 to ADAC in July 2011, the largest HEMS operator in Europe with a fleet of 51 aircraft, including BK117 and EC145 models. As its President Peter Meyer said, "Its performance has enabled us to establish a national network of EMS providers that is without parallel in Germany and serves as an example for similar services elsewhere."

SAVING LIVES. During his visit to India, Dr Erwin Stolpe of ADAC, who participated in designing of EMS helicopter with Eurocopter, noted that "India urgently needed HEMS for its large population across a vast region. Many locations are distant from medical facility and time-critical patients cannot be treated in a reasonable time frame. The need of the hour is to build pan-India infrastructure for HEMS".

REGULATIONS. To ensure the right and timely EMS, there is need to formulate regulations for emergency flights. HEMS have now been incorporated in the civil aviation requirements, a promising start to operations in India. Time remains a key factor in saving lives. In the West, HEMS takes off in three minutes after emergency call, thanks to dedicated regulations for emergency flights. This is yet to be achieved in India. HEMS are a crucial element in saving precious lives. All stakeholders must work together to take on this national challenge and social responsibility.

SILVER LINING AMID TURBULENCE

While airlines are engaged in a life and death struggle, they can look forward to some relief as there are encouraging signs from the government. The government has acceded to the request by the airlines to import ATF directly for their own use.

HE TURBULENCE IN THE airline industry in India appears to be getting worse by the day. Since the beginning of the so called boom that began in 2005, most of the carriers have remained consistently in the red and with each passing year, the financial mess has become more precarious, seriously threatening their survival. While the national carrier Air India has been surviving as it has perpetually been on life support provided from public funds, Kingfisher Airlines, decidedly the most glamourous and world-class carrier and with seemingly the most powerful financial backing by the global liquor giant UB Group, has somewhat inexplicably run aground. Even IndiGo, which has the largest

market share and has been reporting profits consistently for the last three years, has not remained immune to the difficult conditions in the airline industry. It is believed to have posted an operating loss of ₹88 crore in the period 2011-12.

Despite efforts behind the scene and a ray of hope generated by the recent policy change in respect of foreign direct investment (FDI) into Indian carriers by airlines registered abroad, the situation does not seem to be getting any better for the beleaguered airline industry. FDI by carriers abroad may not be a reality anytime soon as most foreign airlines are themselves struggling to survive.

Although airfares have been on an upward trajectory for some time

now, airlines have not benefited financially as the constantly rising cost of inputs have had a devastating impact on the already wafer-thin margins the airlines are operating with. Besides, contrary to the optimistic projections by professional analysts of healthy growth, passenger traffic is actually on the decline, further aggravating financial distress of the airline industry. The situation is becoming so untenable that it prompted the Chief Executive Officer of one of the leading private carriers to state that the airline industry in India is perhaps the only business in this country that is not founded on sound financial principles. His profound observation is not only factual, but also triggered essentially by an overwhelming sense of frustration.

However, the CEO's observation is certainly not far from truth. In the airline industry in India today, all stakeholders other than the airline itself, are making money. First of all, the price of aviation turbine fuel (ATF) in India is amongst the highest in the world owing primarily to high rates of both Central and state taxes. As the price of ATF is no longer regulated, it has been rising continuously in tandem with the international price of crude. As ATF accounts for about 50 per cent of the operating cost of an airline, only around 50 per cent of the base airfare is available to the airlines for other items of expenditure. The oil marketing companies do not lose money at the cost of airlines.

Analysis of the fare structure would reveal that a large portion of the airfare paid by the passenger goes towards a variety of levies such as service tax by the Central Government, passenger service



fee, user development fee or airport development fee (ADF) by the Airports Authority of India (AAI) and transaction fee by the travel agents.

Clearly, the burden of taxes and levies are life-threatening for the airline industry. Landing, parking and navigation charges at the metro airports such as Delhi and Mumbai are 70 per cent higher than that at Changi International Airport in Singapore which is rated as the best airport in the world. Airport charges here are 50 per cent higher than in Europe. The recently approved 345 per cent hike in airport charges will add an annual burden of ₹1,650 crore on the airline industry.

While airlines are engaged in a life and death struggle, they can look

forward to some relief as there are encouraging signs from the government. The government has acceded to the request by the airlines to import ATF directly for their own use and have also been permitted to use public sector facilities like refuelling terminals and storage facilities at a number of major airports in the country, resulting in considerable savings. The AAI has been directed by the Civil Aviation Ministry not to impose ADF on passengers travelling out of the modernised airports at Kolkata and Chennai. The government is also likely to substantially reduce with effect from January 1, 2013, the quantum of ADF currently levied at Delhi and Mumbai Airports. The government has also permitted air carriers to carry out their own ground handling in six metro cities which will help cut cost.

The government appears to have finally woken up to the plight of the airline industry. Better late than never! —B.K. PANDEY



INDISPENSABLE

SP'S MILITARY YEARBOOK 2013

Please send your requirements, NOW at: order@spsmilitaryyearbook.com



SP GUIDE PUBLICATIONS

PROUD PARTNER UHH artner 1.1 -

LOCATIONS EXCLUSIVE TO KEY OFFICIAL MEDIA PARTNER

- INAUGURAL CEREMONY
- ENTRANCE GATES
- REGISTRATION COUNTERS
- EXHIBITION HALLS
- CHALETS

MEET US AT HALL B

(B4.18)

VIP LOUNGE

- PRESS CONFERENCES
- SEMINARS
- DELEGATION LOUNGE
- CAFETERIA & FOOD COURTS
- MEDIA CENTRE
- OFFICIAL DINNERS AND LUNCHES

AERO INDIA 2013 "Asia's Premier Air Show"

Contacts: advertise@spguidepublications.com editor@spguidepublications.com