

# Flying High

India's civil aviation infrastructure sector promises to see a lot of action in terms of new airports and other facilities being built over the coming years, as passenger traffic is soaring, writes **N.B. Rao**

**G**UESS which is one of the fastest growing sectors in the vibrant Indian economy? Information Technology? Real estate? Automobiles? Retailing? All these segments are indeed growing at hefty rates of between 30 and 40 per cent annually, but outsoaring them all and expanding at 50 per cent is civil aviation.

India's civil aviation sector – and the wider aerospace industry – has had a smooth take-off ever since the government initiated its open skies policy a few years ago. After encountering some initial turbulence, it is now cruising smoothly across clear blue skies.

The remarkable growth of the sector has brought the global aerospace industry to India's doorstep. The 6th

International Aerospace and Defence Exhibition (Aero India 2007), which was held in Bangalore from February 7 to 11, attracted about 500 aircraft companies from around the globe.

India is today one of the fastest expanding aerospace markets in the world, as a growing number of airlines and corporates are expected to acquire about a thousand planes over the next 20



**SOARING HIGH:** India is a key market for aircraft manufacturers across the globe



**BUSY TERMINALS:** Greenfield airports will help relieve congestion at terminals in India

years. About 10 years ago, Indian airports handled just around 10 million domestic passengers a year; this has now topped 25 million, and according to the Centre for Asia Pacific Aviation (CAPA), it is likely to cross 60 million by 2010. The total number of passengers (both domestic and international) is expected to cross the 100 million-mark over the next three years.

Billions of dollars are also being invested in building greenfield airports, expanding existing ones, or upgrading hundreds of smaller airports and airstrips. Overall investments needed to expand both the civil aviation and airports infrastructure to meet the burgeoning growth is over \$50 billion by 2015.

According to Praful Patel, the Minister for Civil Aviation, the Indian aviation sector has the potential to grow by 25 per cent annually over the next 10 years. The government is looking towards 'public-private-partnerships' so that infrastructure can be built in the shortest possible time, while maintaining the best of international standards, he says. The international airports in Delhi and Mumbai are being modernised by a consortium of private (both Indian and international) airport developers.

It also plans to take up the modernisation of Kolkata and Chennai interna-

tional airports. Besides this, another 35 airports – in non-metro cities – will also be upgraded over the next few years. Greenfield airports are also coming up in Bangalore and Hyderabad, and new ones are being planned for Mumbai, Pune and some other cities.

Patel also wants state governments to take up development of some of the 300 airstrips that are lying unused all over the country. Besides this, he is also keen on "merchant greenfield airports, which would be private airports built on privately owned lands, within permissible civil aviation parameters." This would also solve the problem of land acquisition, which is a major hurdle in building infrastructure in the country.

The civil aviation sector could attract investment of up to \$45 billion over the next five years, the highest for any industry in India, notes the Minister. India had recently placed the world's largest orders for aircraft with the two top manufacturers, Boeing and Airbus.

Patel notes that every aircraft that is inducted into an airline's fleet generates about 10,000 jobs. The phenomenal pace of growth in the Indian civil aviation sector will create at least four million new jobs over the next 10 years, he adds.

The entry of low cost carriers (LCCs)

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has revolutionised the \$6 billion air travel segment in the country. According to the International Air Transport Association (IATA), the 50 million-odd travellers today account for just about five per cent of the country's total population.

The phenomenal growth of the industry could result in 25 per cent of Indians (over 250 million people) travelling by air. LCCs, led by Air Deccan, launched operations in India in 2003. With their rock-bottom fares, they soon began attracting hundreds of thousands of train passengers, especially those travelling in the upper classes. There are about 50 million passengers who travel upper-class in the Indian Railways, and LCCs like Air Deccan and Spice Jet are targeting them.

According to the Sydney-based CAPA, LCCs will control 70 per cent of the domestic market by 2010, making India one of the leading markets for low fare carriers. Air Deccan, which is barely four years old, is already the second largest domestic carrier, with a 19.7 per cent market share. The airline has the largest route network, covering 61 airports (as against 46 for Jet Airways, the largest domestic carrier, and 43 for Indian, now the third biggest airline).

G.R. Gopinath, managing director of Air Deccan, points out that an increasing

## ROCKETING GROWTH

IT is not just the civil aviation industry in India that is witnessing brisk growth.



Even the aerospace sector, where India has developed an impressive lead over many other countries, is growing rapidly. The Indian Space Research Organisation (ISRO) has entered the global commercial satellite launch market in a big way in recent years. The organisation is now focused on cutting down costs for launch vehicles.

The premier Indian space body has two launch vehicles – the four-stage Polar Satellite Launch Vehicle (PSLV), which places satellites in polar orbit; and the three-stage Geosynchronous Satellite Launch Vehicle (GSLV), which places them in the geosynchronous transfer orbit.

ISRO plans to launch several satellites, including a 350-kg Italian, and an Israeli satellite, this year. With the global launch industry having become extremely competitive, ISRO is working out ways to cut down costs, and to retain its market share. International satellite launch costs are around \$10,000 for a kilo of payload. The organisation aims to increase the number of satellite launches, and hopes for a 10 per cent share in the \$2 billion market.

And with India's growing profile in the realm of space exploration, a university to train space scientists is also being planned by ISRO. According to G. Madhavan Nair, chairman, the organisation plans to set up a 100-acre campus on the outskirts of Thiruvananthapuram, the capital of Kerala.

For India's booming aerospace sector the sky appears to be the limit for growth.

number of people are travelling by air, migrating from other modes of transport. The overall seat capacity in the domestic sector in India, for instance, almost doubled from 70,000 seats in April 2005 to 136,000 seats a day by the end of 2006, he points out. Gopinath believes it is crucial for airlines, especially LCCs, to maintain and control costs. Air Deccan has one of the lowest cost-per-seat-km – at 7.3 cents.

"It is important to ensure prudent route planning, which leads to enhanced

fleet utilisation and better yields," he says. The Indian domestic aviation sector is awash in red ink, as many of the new players are still trying to find their footing.

Many of the private airlines came out with IPOs (initial public offerings) last year, though their share prices have taken a beating in recent months. But both Jet Airways and Air Deccan are in the black, and have seen a turnaround in the third quarter results of the current fiscal. Costs, however, are soaring in

the aviation sector. Airlines have to offer hefty compensation to attract – and retain – talent, as the country is facing an acute shortage of pilots, while fares keep falling.

Almost a dozen airlines have placed orders for a record 450 aircraft worth several billion dollars. The total fleet strength of airlines in India is about 270, which is more than double the figure of about two years ago. US-based Boeing alone has bagged orders for nearly 100 aircraft worth \$15 billion from airlines including Air India – which placed the single largest order from an Indian airline for 68 aircraft worth \$11 billion – Jet Airways, and Spice Jet.

European rival Airbus has won orders for 200 aircraft from other airlines, including state-owned Indian, Air Deccan, Kingfisher, Go Air and IndiGo. About 30 to 40 per cent of the order books of these two international aircraft manufacturers are accounted for by carriers from India. Dinesh Keskar, senior vice-president, Boeing Commercial Airplanes, believes India's carriers would need over 850 aircraft over the next 20 years. Airbus is more bullish, and feels the country would need about 1,100 planes, worth \$105 billion, over the next quarter century.

Interestingly, demand for private and corporate jets is also accelerating. With India Inc on a global acquisition spree, it is not surprising that many of the leading enterprises are willing to invest up to \$75 million apiece for luxury jets for their top executives.

During 2006, for instance, about 100 private jets were sold in India by different international manufacturers. They ranged from smaller corporate jets, to luxurious Airbus Corporate Jetliners (ACJs) and Boeing Business Jets. The total number of corporate jets in India is expected to grow from 150 at present to about 450 in just around three years.

International firms are also setting up fixed base operations (FBOs) to cater to the growing needs of their exclusive clientele. FBOs provide a host of service to private jet owners, including repairs and maintenance, security and flight clearances, flight planning, charters, customs clearances and co-ordinating overseas flights.



**HELI-HOPPING:** Demand for corporate jets and helicopters is accelerating

Raytheon Aircraft Company, which produces the Hawker and Beechcraft planes, is toying with the idea of setting up a maintenance facility in the country. Universal Weather and Aviation, a leading US-based private jet management company, plans to set up a unit in India to cater to the growing demand from international private jetsetters.

International aviation giants are also planning to establish Maintenance, Repair and Overhaul (MRO) facilities in India to cater to the burgeoning airline fleet. Dr Kiran Rao, president, Airbus India, says the European manufacturer is in talks with different companies for a joint venture to operate the facility.

Airbus plans to invest about \$1 billion in India over the next 10 years in an MRO, training centres, and an engineering and design centre. The training centre for A-320 Airbus would have up to eight simulators over the next five years.

International consultancy Frost & Sullivan estimates that India has an eight per cent share in the \$8.7 billion MRO business in Asia. Globally, the MRO market is estimated at \$40 billion. But with the spurt in the number of aircraft in India, the MRO market is likely to cross the \$12 billion mark over the next few years.

Boeing is investing \$100 million in an MRO in Nagpur. Other aviation majors are also planning similar facilities. They include GE Aviation, Singapore Airlines, Kingfisher, GoAir, Jet Airways and Spice Jet.

Public sector Hindustan Aeronautics Ltd (HAL) is also planning to enter the MRO business for civil aircraft, possibly in a tie-up with an international partner. Ashok Baweja, chairman, HAL, says that the facility could be located at its Bangalore airport campus.

The state-owned giant is being wooed by several international aviation majors, including Lockheed Martin, Boeing, Airbus, Pratt & Whitney, Bell and Eurocopter, who are interested in tie-ups with the domestic defence aeronautics firm. Baweja points out that there are large offset opportunities in both military and civil projects in the country.

Government-owned Airports Authority of India (AAI) is also planning to spin-off subsidiaries for ground handling, maintenance, MRO, cargo and design and development of airports. Another area that is attracting global attention is training. The civil aviation sector in India needs at least 500 commercial pilots every year, but just about 200 pilots graduate out of the various schools at present. The gap is bridged by a growing number of expatriate fliers.

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The Civil Aviation Ministry plans to start an Aerospace Management Academy in Delhi, offering post-graduate diplomas in aviation management. The government is also promoting a new pilot training institute near Nagpur. It is also increasing the intake at the Indira Gandhi Rashtriya Uran Akademi from 40 to 100 every session.

US-based Spartan College of Aeronautics and Technology plans to start a flying club to train pilots and offer courses in aeronautical engineering. The proposal has got the approval from the Foreign Investment Promotion Board, and the campus is likely to come up in Haryana.

Textron, which manufactures Cessna aircraft and Bell helicopters, also plans to set up a training institute for pilots in India.

The frenzied growth in the civil aviation industry in India is triggering off huge infrastructural requirements on the ground. Developers of airports and related infrastructure from around the world are eagerly eyeing the industry, one of the fastest growing in the world. And the government is increasingly looking towards 'Public-private partnerships' so that infrastructure can be built in the shortest possible time, while maintaining the best of international standards.