



[snapshots]



Third Largest Market in the Near Future



BY R. CHANDRAKANTH

The fourth India Aviation 2014 got off to a spectacular start with Boeing-Spicejet formalising an order for 42 Boeing 737 Max 8 worth US \$4.4 billion. Otherwise the inaugural function was marked with speeches indicating the enormous potential of the aviation industry and how the government was trying to address these challenges.

The Minister for Civil Aviation, Ajit Singh reiterated India's move towards becoming the third largest aviation market by 2020, from its present ranking of 9th largest. Indian aviation handled 121 million domestic and 41 million international passengers with over 85 international airlines operating to India and five Indian carriers connecting to 40 countries. Indian airports are poised to handle 336 million domestic and 85 million international passengers by 2020 and the commercial fleet size is expected to grow from 400 to 1,000 aircraft by 2020.

He said that the government had envisaged an investment of \$12.1 billion in the airports sector during 12th Plan period, of which \$9.3 billion would come from the private sector for construction of new airports, expansion, and modernisation of existing airports and development of low cost airports.

However, the air traffic density in India, he said, is very low at 72 as compared to China (282), Brazil (231), Malaysia (1225), USA (2896) and Sri Lanka (530). This indicates the untapped market potential given the projected burgeoning young population and rising disposable income levels in future. "We are looking into further expanding the sector by promoting regional and remote-area connectivity."

The government, he stated, had announced a regional and remote area air connectivity policy, which prescribes several financial and other concessions to the operators connecting regional and remote area airports. "Besides, the work on over 50 low-cost airports, located in remote and interior areas of the country as already been initiated by the Airports Authority of India. I am confident that these measures shall further boost the growth of low-cost carriers in India."

The Minister said that the government in tune with general policy of liberalisation has brought in positive initiatives to attract foreign direct investment and rope in private investments. The biggest game changer in this direction has been to allow 49 per cent foreign direct investment by foreign airlines in Indian carriers. "The results of this policy are already visible as two new scheduled airlines Air Asia and Tata SIA are in the process of starting their operations in the near future. This is in addition to the FDI of US \$350 million by Etihad into Jet Airways. In order to create positive environment, far reaching reforms including liberal bilateral air services agreement, partnerships and code-sharing; allowing direct import of ATF by airline operators; external commercial borrowings for airlines; allowing operations of Airbus A380; liberal allocation of international traffic rights to private Indian carriers; abolition of aircraft acquisition committee and privatisation of leading airports."

Growth in airports and air traffic capacity, he said, had to be accompanied by growth in skilled manpower. The government was setting up a separate civil aviation university.

The Secretary of Ministry of Civil Aviation, Ashok Lavasa, said that India had made tremendous strides



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SpiceJet mega order of Boeing 42 737 MAX 8s



India Aviation 2014 began with a bang with Boeing and SpiceJet formalising an order for 42 737 MAX 8s. The order, previously listed as unidentified on the Boeing Orders & Deliveries website, is valued at \$4.4 billion at list prices. Deliveries commence in 2018.

"SpiceJet greatly values the ties we have built over the years with Boeing. The Boeing Next-Generation 737 aircraft, the mainstay of the fleet ever since SpiceJet started operations, have vindicated our choice by their endurance, reliability and cost effectiveness," said S.L. Narayanan, Group CFO for The Sun Group. "The induction of Boeing 737 MAX will further modernize our fleet, improve customer experience, and ensure that we operate the most efficient fleet well into the future."

The 737 MAX brings the most advanced engine technologies to the world's best-selling airplane, building on the strengths of today's Next-Generation 737. The 737 MAX incorporates the latest-technology CFM International LEAP-1B engines to deliver the highest efficiency, reliability and passenger comfort in

the single-aisle market.

"The order is a tremendous endorsement of the 737 MAX's unsurpassed fuel efficiency," said Dinesh Keskar, Senior Vice President of Asia Pacific and India Sales, Boeing Commercial Airplanes. "The capabilities of the 737 MAX supports SpiceJet's mission to become India's preferred low-cost airline. We are very proud to be partners with SpiceJet and a part of the airline's continued success with the addition of the 737 MAX."

Development of the 737 MAX is on schedule with firm configuration of the airplane achieved in July 2013. First flight is scheduled in 2016 with deliveries to customers beginning in 2017. Already a market success, the 737 MAX has accumulated more than 1,800 orders to date and will have 8 percent lower per-seat operating costs than the future competition.

With today's announcement, SpiceJet has ordered 90 airplanes directly from Boeing, which includes the 737-800, 737-900ER and now the 737 MAX. To date, SpiceJet has taken delivery of 31 of the airplanes. •

in aviation as passenger and cargo throughput registered an impressive compounded annual growth rate of 13 per cent and 10 per cent respectively during 2003-13. The passenger handling capacity of airports in India has risen from 72 million to 233 million in the last five years.

He said the civil aviation industry is experiencing a new era of expansion driven by factors such as low cost carriers, modern airports, FDI, information technology interventions, regional connectivity etc. This surge has fuelled the demand for support services like ground handling, maintenance, repair and overhaul etc. The overall air traffic is expected to grow at an annual average growth rate of 10.1 per cent in this decade. Domestic traffic is expected to grow at 11.4 per cent and international traffic is expected to grow at 9.5 per cent for the next 10 years.

In addition to the Greenfield airports at Navi Mumbai, Goa, Kannur and Kushinagar, the Airports Authority of India has identified six airports for private management under the PPP route.

The Governor of Andhra Pradesh, E.S.L. Narasimhan said that the civil aviation sector was presently going through multiple headwinds. However, the sector had nearly \$80-90 billion opportunity, but what was required was positive liberal environment.

The Ambassador of France, Francois Richier talked about the vibrant aerospace and defence industry in France and how the two countries could partner in civil and military aviation.

The Director of US Trade and Development Agency, Leocadia Zak said the US-India Aviation Co-operation Programme (ACP) launched seven years ago exemplified the growing relationship between the two countries. A road-map for future collaboration in the sector was created and two contracts in the airport sector were progressing in the right direction.

In his welcome address, the President of the FICCI, Sidharth Birla called for major policy changes in the aviation sector, particularly to do with taxation and aviation turbine fuel which is 60 per cent higher in prices compared to international markets. He suggested creation of an essential air services fund and infrastructure bonds. •

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Embraer, Air Works partnership

BY R. CHANDRAKANTH

Embraer Executive Jets has signed a memorandum of understanding (MoU) with Air Works Pvt Ltd to provide full maintenance support to the Legacy 500 and Legacy 450 customers in India. The agreement was formally signed at India Aviation 2014.

This agreement comes ahead of the Legacy 500 midsize jet's entry into service in the first half of 2014. The Legacy 450 mid-light jet's certification is expected a year later. This is the second MoU signed to support the Legacy 500 in India.

This MoU with Airworks is yet another step in our preparation to fully support Legacy 500 and Legacy 450 customers upon delivery of their aircraft," said Edson Carlos Mallaco, Vice President, Customer Support and Services, Embraer Executive Jets. "India is one of the countries with a fleet of the complete portfolio of Embraer Executive Jets in operation, which we support with a network of Embraer authorised service centres strategically located across the nation, and field support representatives to swiftly respond to our customers' needs."

"We have a long standing relationship with Embraer Executive Jets and have been providing support to their customers since 2010," said Vivek N.Gour, Managing Director & CEO of Air Works Pvt. Ltd. "We are proud to be able to provide support for their latest Legacy 500 and Legacy 450 aircraft. This is in addition to the support we currently provide for owners and operators of the Phenom 100, Phenom 300 and the line maintenance support for the Legacy 600 and Legacy 650 in India."

The multiple Embraer authorised service centres in India are also supported by the company's customer support team in Singapore, with access to spare parts inventory in Bangalore, Singapore and Australia. A 24-hour customer contact centre at the company's headquarters in Sao Jose dos Campos, Brazil, complements the global service network of Embraer Executive Jets, which comprises about 70 owned and authorised service centres. •



VIVEK N. GOUR, MD & CEO, AIRWORKS AND ANDRE LUIS VIEIRA DE SOUZA, DIRECTOR OF CUSTOMER SUPPORT AND SERVICES, ASIA-PACIFIC, EMBRAER EXECUTIVE JETS

Jet Aviation appoints Arrow Aircraft Services as MRO sales representative

Jet Aviation has entered into an agreement with New Delhi-based Arrow Aircraft Services Private Limited (Arrow Aircraft Services), appointing Arrow Aircraft Services as its MRO sales representative for India effective April 1, 2014.

Arrow Aircraft Services will help promote Jet Aviation's maintenance and refurbishment business, including the company's MRO facilities in Dubai, United Arab Emirates, Singapore, Geneva and Basel.

"Business aviation in India is strong," says Oliver Bergsch, Jet Aviation's vice president of MRO Sales and Customer Relations, EMEA and Asia. "Arrow Aircraft Services is established in the region and is known for its integrity, dependability and hands-on approach. We are very pleased to partner with them to explore opportunities of mutual interest."

Rohit Kapur, managing director of Arrow Aircraft Services, adds, "Jet Aviation is a long-standing and reputable MRO service provider committed to meeting the highest safety and quality standards. It holds approvals and authorizations from a number of OEMs and is capable of servicing all types of aircraft through its extensive global network. Our agreement provides an excellent opportunity for aircraft owners and operators in India to ensure the lifecycle and safety of their aircraft." •

Air Asia India's first aircraft in India

BY VASUKI PRASAD

Sources in Toulouse have confirmed that VT-ATF, Air Asia India's first A320, will depart Toulouse today evening (12th March 2014) to reach Chennai on the morning of the 13th at 09:30hrs local (IST).



Air Asia's flight crew are ferrying the airplane from Toulouse. The great circle direct distance between Toulouse (LFBO) and Chennai (VOMM) is 4,390NM. The ferry flight will however make one stop at Ankara's (Turkey) Esenboğa International Airport (LTAC).

The aircraft is an A320-214SL (A320 airframe powered by the CFM56-5B6 engine and featuring the Sharklets (Airbus' term for winglets) The 56-5B engine delivers 23,500 lbf (100 kN) of thrust, per engine.

In comparison, Go Air flies the A320-214SL, which features the more expensive CFM-56-5B4, which delivers 27,000 lbf (120 kN) of thrust, per engine, and consequently allows for a higher maximum takeoff weight.

Air Asia India's A320 will allow the airline to finish off its last formality: route proving flights, which essentially are dummy flights (real flight, but with no paying passengers) to either one or more of its destinations from its base, to prove to the DGCA that it can smoothly handle and meet operational requirements. Once done, and if the DGCA is satisfied, the airline will be granted its AOP, paving the way for operations to start. The airline is expected to commence commercial operations in May 2014. •

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General Aviation in dire straits, government looks the other way

BY R. CHANDRAKANTH

With bad times hitting the general aviation sector, in 2013 as many as 19 business jets were sold by their Indian owners in overseas markets. In the same year, the addition to the Indian inventory was just three jets, indicating a negative growth for the first time. It had to come sooner than later as the general aviation industry continues to grapple with myriad of problems, most of it created by governmental policies or the lack of it.

Dwelling at length on the woes of the general aviation sector, on the eve of India Aviation, the President of the three year old Business Aviation Operators Association (BAOA), Rohit Kapur said the business aviation industry had been 'boxed into a situation' of hard rock and the sea. And the government was just not listening to the various pleas of the industry, as it 'perceived' business aviation as 'personal indulgence' and 'corporate excess' despite business aviation being documented as a business tool and a critical enabler of economic development.

Though the number of general aviation aircraft had gone up from 11 in 2003 to 552 in 2013, the decline in the growth rate of the sector began in 2007 when the government introduced customs duty and did not address infrastructural issues. Data on the imports vs deregistration of business jets indicated the gradual downward slide. In 2010, the number of imports was 48 and deregistration was 20; in 2011 the ratio was 20:17; in 2012 it was 38:31; and in 2013 it was 3: 19.

Rohit Kapur said that with such trends, the BAOA which in 2012 had forecast that the business aviation segment would grow at 12.5 per cent now has more than halved it. In 2012, it had pegged the probable aircraft numbers at 1793 by 2020 which as per 2014 projections is 922, down almost by half.

HIGH IMPORT DUTY

In 2006, the government differentiated the customs duty structure, imposing 26 per cent on private jet acquisitions and zero per cent on acquisitions by non-scheduled operators. In 2010, it revised it to 18 per cent for private jet



purchases and 2.5 per cent for NSOPs. This differentiation has led to several anomalies. The government should roll back the duty if it has to promote general aviation, he demanded.

SEPARATE REGULATORY FRAMEWORK

Rohit Kapur said that the association has been pressing for a separate regulatory framework for general aviation and allow it to grow legitimately as a business venture that creates profits both tangible and intangible besides adding to the GDP.

"Indian corporates are realising business aviation as a vital commerce tool. However, the government is still perceiving it as personal indulgence and corporate excess. We have requested the Directorate General of Civil Aviation to re-validate regulations with specific regulations for BA and create a roadmap for its growth for the next 10 to 20 years."

NON-EXISTENT MRO AND FBO

In India the number of MROs (maintenance, repair and overhaul) was 52, but none was full-fledged and 50 per cent of heavy maintenance and 100 per cent of engine repairs on aircraft was being done outside India, either in Singapore or Dubai and even Philippines. Some of the MROs have been asked to vacate space at airports and there are taxation issues that make the MRO business unviable. "There is no FBO (fixed based operator) in the true sense in India. The main airports do not want us. They consider us as nuisance and have worked out their revenue streams based on only scheduled airlines."

PROBLEM OF PERCEPTION

Kapur and Vinit Pathak, member BAOA, concurred that the single most challenge for the general aviation industry is that of 'perception' that it is 'pure luxury' and those in the government do not want to listen to the kind of economic benefits it has to offer to the country as a whole. The industry size is about \$2 billion and it provides direct employment to 12,000 and given the right policies, it could grow these numbers and be part of economic enablement. •

Air India has no plans to ground Dreamliner: Rohit Nandan

BY R. CHANDRAKANTH

The Chairman and Managing Director of Air India, Rohit Nandan emphatically stated that there was no plan of grounding Boeing's Dreamliner aircraft, despite the 'spate of incidents' in the recent past. "We are satisfied with the quality of service provided by Boeing."

Nandan told presspersons at India Aviation 2014 that Air India has had detailed discussions with the US aerospace major Boeing and that 'such incidents were not unusual in a new aircraft'. And these incidents have not had any bearing on the safety aspect, Air India to that extent is reassured about the product. However, he added that Boeing is upgrading software programmes on the Dreamliner and the number of incidents is coming down.

The dispatch reliability of Dreamliner with Air India, he mentioned is higher than the world average of 98 per cent. It is presently 98.6 per cent and the airline was working on improving that reliability further.

With regard to the issue of bilaterals going in favour of foreign airlines, Nandan said Air India has survived such competition in the past and would do so in the future. "There is no escape". •



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Sikorsky consolidating in India

BY R. CHANDRAKANTH

Having delivered 75 cabins of S92 from its Hyderabad-based joint venture Tata , Sikorsky considers India of strategic importance to drive its helicopter sales, if not now, but in the near future when the helicopter industry opens up, said Arvind Walia, Executive Vice President, Sikorsky India.

Speaking to SP's ShowNews at India Aviation, Mr. Walia said the growth of the helicopter market in India is subject to the policies and incentives that the government would offer. Presently, the policies constrained the growth of the sector while the potential is enormous. The cabin developed in India was totally indigenous and the capacity was four a month and Sikorsky had a backlog of orders for three years as the demand for the machines is high, he said and added that a full helicopter production in India would totally depend on the 'big orders'.

In the VVIP category, Sikorsky had five operational helicopters (S76 C++) in India and there were sectors such as mining, offshore, energy, tourism, charter which could drive the helicopter business. The products were highly reliable as Sikorsky laid emphasis on safety and performance.

He said the company was pursuing defence contracts, along with civilian product lines and also looking at opportunities in research and development as there is considerable scientific talent over here. •



Dassault Falcon long haul prospects

BY R. CHANDRAKANTH

Dassault Aviation which introduced the first business jet into India in 1995 with the Tata Group is an expansion mode with regard to its Falcon business jets.

The International Sales Director (Falcon Business Jets), Thierry de Poncins told SP's ShowNews that the company was optimistic about the future of business aviation in India, though in the two to three years 'nothing much has been happening'. "We are hoping that after the elections there would be not only a stable government but also one that would be pro-business."

Poncins revealed that there were several customers in 'stand-by mode' in India and that once the new government is in place, they would come on board. Dassault Aviation which has 22 aircraft presently in India, all high-end long range business jets, is expecting 2014 to be good. "We expect sales of nearly 4 to 5 business jets in 2014-15. We sell directly to the customer, thus giving them the margins which we would have given a representative."

Of the 22 aircraft, 85 per cent of the aircraft are with non-scheduled operators and the rest with private individuals. The sectors that are driving business jets sales are energy, medical, mining etc. "Most of the operators see benefits of long range travel from India to Europe, Africa without difficulties."

"Even when there has been a slowdown in the Indian economy, we have believed in the market here. We were the first at Aero India and also at India Aviation." •



Union Minister of Civil Aviation Ajit Singh at United Technologies Corporation being briefed by Palash Roy Chowdhury, Country Manager – Pratt & Whitney (third from left) on the revolutionary Geared Turbofan (GTF) engine technology. The GTF engine design makes the engine ultra-efficient, and reduces fuel burn by up to 16 per cent, nitrogen oxide emissions by half and noise footprint by 75 per cent. In India, IndiGo and GoAir's new A320neo aircrafts and Air Costa's Embraer aircraft will be powered by Pratt & Whitney's Geared Turbofan engines. Shown in the image is a working scale model of the GTF engine. Also seen in the picture is Air Vice Marshal (Retd) Arvind Walia, Regional Executive, India & South Asia, Sikorsky (first from left). Pratt and Whitney and Sikorsky are part of United Technologies Corporation.



Rolls-Royce comes up with next-gen engine designs



Rolls-Royce has shared details of its next generation of engine designs, which could be ready within ten years, featuring technology innovation designed to transform performance. The company has built a technology leadership position with its Trent family of engines, the latest of which, the Trent XWB, is the world's most efficient engine flying today. Trent engines will continue in service for decades to come with 2,500 in service and more than 2,500 on order.

Rolls-Royce is continually innovating and, as part of that ongoing process, is looking to build on the success of the Trent family of engines with two new generation engine designs.

The first design, Advance, will offer at least 20 per cent better fuel burn and CO₂ emissions than the first generation of Trent engine and could be ready from the end of this decade.

The second, UltraFan, a geared design with a variable pitch fan system, is based on technology that could be ready for service from 2025 and will offer at least 25 per cent improvement in fuel burn and emissions against the same baseline.

Colin Smith, Rolls-Royce Director – Engineering and Technology, said: “These new designs are the result of implementing our ongoing technology programmes. They are designed to deliver what our airframe and airline customers tell us they need: even better fuel efficiency, reliability and environmental performance.”

Eric Schulz, Rolls-Royce, President – Civil Large Engines, said: “As innovators, we can never stand still, even when we have the leadership position. Our horizons extend into the coming decades and we have amassed a range of new technologies to meet the needs of our customers. I am confident that our engine design strategy will ensure we power the future of global aviation.”

Both engine designs are the result of the ongoing research and development investment, of approximately £1bn a year, which Rolls-Royce makes across its aerospace and non-aerospace businesses.

The designs will feature architecture and technology improvements, all currently at an advanced stage of development, that include:

- A new engine core architecture – to deliver maximum fuel burn efficiency

and low emissions.

- A CTi Fan System – carbon/titanium fan blades and a composite casing that reduce weight by up to 1,500lb per aircraft, the equivalent of carrying seven more passengers at no cost
- Advanced ceramic matrix composites – heat resistant components that operate more effectively in high turbine temperatures.
- A geared design, called UltraFan, which will deliver efficient power for high-thrust, high-bypass ratio engines of the future.

In addition, Rolls-Royce has developed and tested technologies to support the Open Rotor engine concept and is positioned to mature them should there be clear market demand for such a product.

Advance and UltraFan are engine development names – in line with Rolls-Royce tradition, the family names for these engines will be announced at the appropriate time.

Rolls-Royce's vision is to create better power for a changing world via two main business segments, Aerospace and Marine & Industrial Power Systems (MIPS). These businesses address their markets with two strong technology platforms, gas turbines and reciprocating engines, for use on land, at sea and in the air.

Aerospace comprises Civil Aerospace and Defence Aerospace. MIPS comprises Marine, Energy, Nuclear and Power Systems. Power Systems includes Rolls-Royce's 50 per cent ownership of Rolls-Royce Power Systems (RRPS), a collaboration with Daimler AG. RRPS was fully consolidated in the results of Rolls-Royce plc for the first time in 2013.

Rolls-Royce has a broad customer base comprising more than 380 airlines and leasing customers, 160 armed forces, 4,000 marine customers, including 70 navies, and 1,600 energy and nuclear customers in 120 countries.

The annual underlying revenue was £15.5 billion in 2013, around half of which came from the provision of aftermarket services. The firm and announced order book stood at £71.6 billion at 31 December 2013. In 2013, Rolls-Royce invested £1.1 billion on research and development. We also support a global network of 29 University Technology Centres, which connect the company's engineers with the forefront of scientific research. •

Steady worldwide helicopter demand: Honeywell

- 4,800-5,500 new civilian helicopter deliveries expected during 2014-18
- Latin American purchase plans remain strongest in the world
- Increased interest in medium twin-engine helicopters

In its 16th annual Turbine-Powered Civil Helicopter Purchase Outlook, Honeywell Aerospace expects that 4,800-5,500 civilian-use helicopters will be delivered during 2014-18. Overall demand remains steady versus the 2013 five-year forecast, with large fleet operator requirements offsetting a moderate softening in new helicopter purchase plans reported in the 2014 Honeywell survey. Latin America continues to lead all regions in new purchase rates, with up to 32 per cent of respondent fleets slated for turnover with a new helicopter replacement or addition.

The forecast of civil turbine-powered helicopter purchases has the five-year share of demand from the US and Canada at 26 per cent, which combined with Latin America represents 50 per cent of the total global demand. Europe's share closely follows with 23 per cent, with the Asia-Oceania region accounting for 19 per cent, and Africa and the Middle East ranking under 8 per cent.

"Global demand looks steady on the heels of strong 2013 performance," said Tom Hart, Vice President, Defence and Space sales, Honeywell Aerospace. "Utility helicopter purchase interest is trending upward. Helicopter replacement cycles and increased operating hours in the law enforcement and oil & gas industries helps sustain demand in those sectors. Several new platforms are scheduled to enter service in the next few years and this also is expected to bolster overall demand."

Operators who intend to purchase a helicopter within the next five years noted that the age of their current aircraft, contracted replacement cycle and warranty expiration were key drivers for their decision. For those surveyed, the make and model choice for their new aircraft is strongly influenced by range, cabin size, reliability and safety, hot/high performance, and brand experience.

REGION-SPECIFIC RESULTS

Moderately lower survey purchase plans were recorded in all regions this year; however large fleet or "mega" operator requirements not captured in the survey offset the softer results returned by survey respondents. As a result, total projected demand remains stable at relatively strong levels in the near term.

A significant part of the European pullback stems from a large drop in Russian buying plans compared with a year ago. The sample of Russian operators responding grew in 2013, but remains small and adds some volatility to the overall European results.

Latin America continues to have the highest fleet replacement and growth expectations among the regions. In terms of projected regional demand for new helicopters, Latin America now rivals Europe to claim the world's second-largest regional market, behind North America.

"With demand for new helicopters remaining steady, and aircraft lasting longer through replacement cycles, Honeywell is ready to support both new installations and fleet upgrades worldwide," Hart said. "Our propulsion, safety, navigation, communications and flight services can help aircraft stay efficient, powerful, reliable and safe throughout their entire time in the air."

Demand in high-growth regions remains fluid with strong results recorded for China in the 2014 survey, while Brazilian purchase plans remained fairly stable and Indian respondents reported more conservative purchase plan levels for new helicopters this year.

OPERATOR PREFERENCES BY CLASS OF HELICOPTER

- Light single-engine helicopters continue to be the most popular product class, with the Airbus EC130/AS350 series, Bell 407 and Robinson R66 the most frequently mentioned models.
- Intermediate/medium twin-engine helicopters are the second most popular product class, with approximately 33 per cent of total survey participants planning to buy a new model of this type. The most frequently mentioned models were the AW139, AW169, Bell 412, EC145 and Sikorsky S-76 series helicopters.
- The light twin helicopter class earned 26 per cent of total operator purchase plans in the 2014 survey, with the EC135, Bell 429 and AW109

series helicopters noted the most frequently.

- Heavy multi-engine helicopters, such as the EC225, Mi-8/17 and S-92, registered a small decline in purchase plans in the 2013 survey; however, demand from large oil and gas fleet operators not included in the survey continues to support overall volume in the heavy class.

SATISFACTION WITH AIRCRAFT

Again in this year's survey, Honeywell asked all respondents to indicate their current satisfaction over the last year with each model of aircraft they operate. For models that received more than 25 responses, the make/models with the highest net scores are the AW139, Bell 407, Bell 412, EC120, EC130/EC350 series and Sikorsky S-76.

These top platforms account for nearly 50 per cent of all survey make/model mentions and can be considered the top current production helicopters in terms of recent customer satisfaction attitudes and likelihood to promote. Many other make/models currently in production also received excellent scores that did not make it into the top six listing.



HELICOPTER USE EXPECTED TO INCREASE

Helicopter fleet utilisation is expected to increase this year. Planned increases by region include:

- North America: 20 per cent of operators plan increases, and only 7 per cent plan decreases.
- Europe: 22 per cent of operators plan increases, and 6 per cent plan decreases.
- Latin America: 36 per cent of operators plan increases, and only 4 per cent plan decreases.
- Middle East and Africa: 23 per cent of operators plan increases, and only 11 per cent plan decreases.
- Asia: 29 per cent of operators plan increases, and 6 per cent plan decreases.

When examining usage trends across segments, oil and gas was the highest at an annual average of approximately 720 hours per aircraft, followed by law enforcement at over 400 hours per year. Tourism, emergency medical services and general utility were closely grouped at approximately 375-400 hours per year. The lowest average use was reported by corporate segment operators at just over 300 hours per helicopter per year. •

Remos GX glass cockpit light sport aircraft



Remos Aircraft GmbH, the manufacturer of the next generation glass cockpit light sport aircraft, has appointed SRK Aviacom (I) Pvt Ltd as its dealer in India.

Capt. Sanjay, Executive Director of SRK Aviacom, said: "Trust, quality and reliability are the most important cornerstones of the REMOS company culture and I would like to convey this philosophy to our customers through personal and direct contact, and establish Remos's brand in Asia".

The Remos GX Aircraft accelerates rapidly and takes off in less than 300 feet—"Jet-Feeling guaranteed". The climb power is more than 30 per cent higher than other light aircraft; the climb speed of 80 to 90 mph is reached within short time. The first REMOS SLS design was accepted by the DGCA and cleared by acquisition committee, Ministry of civil Aviation for banner towing.

Banner towing will be new in the Indian skies and a great platform for bill board and banner display. It is a new market in India and brands can be seen flying in the air. •

New policy after new government

BY R. CHANDRAKANTH

The Government of India has been talking to different stakeholders in the aviation industry and is in the process of drafting a new policy which would prop up the aviation sector, both commercial and general aviation.

Disclosing this to presspersons at India Aviation, the Civil Aviation Secretary, Ashok Lavasa said that one would have to wait for the new government in place for the new policy. However, one of the priorities was promoting regional aviation, connecting Tier II and Tier III cities. The plan was to develop low cost airports across the country.

As regards international route liberalisation, now restricted by the five year and 20 aircraft rule, Lavasa said that it would be considered once a new ministry was formed.

On the issue of aviation safety and security, he mentioned that international safety and security standards as enunciated by International Civil Aviation Organisation (ICAO) and other bodies were being followed. "It is an ongoing exercise and the authorities will ensure that standard operating procedures are followed." •



CFM off to a great 2014

CFM International has begun the year with a bang. It has booked orders for 614 CFM56 and LEAP engines to date. Overall, CFM has received orders for 352 CFM56 engines (including spares) from several customers, including FlyDubai, Air Algerie, and GECAS, who ordered 20 CFM56-7B-powered Boeing Next-Generation 737s, and VietJetAir which has selected the CFM56-5B to power 21 Airbus A320ceo aircraft.

Singapore-based Lion Air recently finalized an order for 60 A320ceo aircraft powered by CFM56-5B engines. These engines were included in the 2013 total order count of 2,723 engines.

The company has also logged orders for 262 LEAP engines: Flydubai: finalised its order for 75 LEAP-1B-powered 737 MAX aircraft announced at the 2013 Dubai Air Show GECAS: 20 LEAP-1B-powered Boeing 737 MAX aircraft. To date, CFM has received total orders for nearly 6,000 LEAP engines across all three models, while total CFM56 engine orders stand at more than 30,640 engines.

"This is a great way to come off a record orders year," said Jean-Paul Ebanga, president and CEO of CFM International. "Having more than 600 engines already on the books – and it is only February – is just incredible. We take it as a true testament to the faith our customers have in our products and in our ability to execute on our promises.

"As we get ready to celebrate our 40th anniversary later this year, we constantly remind ourselves that we simply could not be here without the tremendous trust that has been placed in us by Airbus, Boeing, and COMAC, as well as by our 530 operators around the globe. It is truly humbling." In 2012, Jet Airways and CFM International celebrated the achievement of three million total engine flight hours by the airline's fleet of CFM56-7B engines. Jet Airways' fleet includes 59 Next-Generation 737-700/-800/-900 aircraft powered by CFM56-7B engines.

According to a Bloomberg report, Jet Airways, India's second largest air-



line by market share is likely to order 50 Boeing 737 aircraft in a deal worth \$2.5 billion and this means business for CFM. •



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