

## PROPULSION

# R-R forecasts massive demand for engines in Asia-Pacific region

**Geoff Thomas**

UK engine builder Rolls-Royce expects continuing, strong growth throughout Asia-Pacific over the next 20 years to underpin global demand for 51,000 new commercial aircraft, ranging from business jets to high-capacity airliners.

Unveiling its updated civil market forecast on the opening day of the Farnborough airshow, Rolls-Royce says the 114,000 jet engines required to power the global fleet's growth would have a potential value of \$600 billion.

The company believes that high fuel prices will drive airlines to focus even more on the operating cost benefits of highly efficient, new-generation jetliners.

Rolls-Royce, which produces an inde-

pendent forecast using a wide range of industry sources, expects air traffic demand in Asia-Pacific to grow at an average of 6.6%, year-on-year, throughout the forecast period.

Within this estimate, growth in China over the next 20 years is anticipated to be around 8% per annum. Since the forecast was last updated in March 2005, more than 150 passenger jets have been delivered to Chinese operators. Demand from China is expected to total 6,500 engines valued at \$65 billion through to 2026.

India continues to be recognised as a major, emerging force in commercial aviation. India is included within the Asia-Pacific forecast total, but is expected to provide a potential market in its own right for at least 1,600 engines in the next two decades.

The North American market – although growing more slowly than other regions – remains the largest market for single-aisle aircraft and business jets.

Much of the demand is underpinned by the need to replace existing aircraft, giving a market for around 20,000 engines for mainline and regional aircraft, and 30,000 engines for business jets – worth a total of \$160 billion.

## Growth

Rolls-Royce reiterates its view that fleets in the CIS and Russia will also produce significant growth, creating a 20-year demand for 3,000 engines. Although used aircraft are expected to feature widely in the business mix, the growth will nevertheless have the effect of generating liquidity in the wider market.

The forecast anticipates the single aisle, 110-180 seat segment will create the largest unit demand with anticipated demand for 29,000 engines worth \$185 billion.

The largest sector by value, however, covers small and medium twin-aisle aircraft of 250-350 seats, triggering engine sales worth \$230 billion, with 40% of the demand coming from Asia.

Rolls-Royce also expects to see strong and growing demand for aircraft in the 400-seat-plus category, pointing to a potential \$85 billion engine market in this sector, including those needed to power the growing cargo fleet.

Rapid growth in the large business aircraft sector is seen as a major factor within the corporate jet market, which is expected to generate a requirement for 51,000 engines with a value of \$70 billion.



## Bachelet: Market is heading for a period of stability

**Colin Baker**

CFMI International (CFMI) president Eric Bachelet says the GE/Snecma joint venture will receive orders for "not less than" 1,500 aircraft engines this year, as he predicts a period of stability in the aircraft engine market.

CFMI has racked up orders for 1,270 engines in the first half of 2006, with a total list price of \$7.6 billion. If the year-end figure is above 1,500, it will not be too far off the record 1,640 seen last year, which Bachelet says was partly due to some catching up after 9/11. "This year came to us as a surprise. We didn't expect such a positive result," he explains.

The manufacturer expects to produce 1,050 engines this year, and Bachelet says that production rates could be as high as 1,300 by 2007-8, possibly beating the record levels seen at the end of the last decade and well up on last year's figure of 800.

Bachelet is also pleased with the upgrade kit market, with CFMI receiving 580 orders with a value of \$730 million in the first half of this year, five years after its upgrade product was launched with an order from Southwest Airlines.

CFMI has now received around 19,000 firm engine orders since it was founded in 1974, and has 15,800 engines in operation with more than 450 customers.

There are more than 6,350 CFM-56 powered aircraft in service.

Against this background, Bachelet says that CFM has achieved a 55% market share in the market for aircraft over 100 seats in the period running from January 1996 to June 2006, when 9,441 aircraft were ordered.

Bachelet says that demand from emerging economies will help firm up the market in the short-to-medium term. "We think growth will be relatively stable in the coming years. In the past, the industry has been very cyclical. This time I think it will be more stable. Demand is very geographically diverse."

## Replacement

He notes that orders in countries such as India and China are largely to cater for new demand rather than replacement aircraft. Bachelet points to the fact that there are 6,537 aircraft in service in the US, with a population of around 300 million, whereas China has around 1,000 aircraft serving 1.3 billion people, and India just 200 aircraft for 1.1 billion people.

"China is ordering 100 aircraft per year, with 16% annual traffic growth. India saw nine new airlines in 2005, and has traffic growth greater than 20% as travel shifts from rail to air. In Latin America, air travel is replacing bus travel, and there is 11% traffic growth. In Russia, airlines are buying despite import duties, and there is 10-15% traffic growth," Bachelet notes.

"Demand is going to stay for the longer term. The order cycle has shortened. There are less anticipatory orders than in the past," he says.

"The only challenge has been the evolution of fuel prices, but so far the impact has been minimal," he says.

In the longer term, CFMI predicts around 15,000 aircraft in the 91-199 seat category will be required between 2006 and 2025.

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**Eric Bachelet**

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