

LONG TIME COMING

The A340-500/600 is the latest Airbus to get the stretch treatment. But the aircraft has more than mere length to recommend it

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Airbus is no stranger to stretching or shortening its aircraft to suit market demand. But with the A340-600 it has taken the art to new extremes, producing the world's longest passenger aircraft in the process.

The A340-600, which took to the air for the first time on 23 April, breaks new ground in many ways. It is the first Airbus powered exclusively by Rolls-Royce Trent 500 engines and, with a maximum certifiable capacity of up to 475 passengers, the first to compete directly with the Boeing 747-400.

The aircraft has a new passenger cabin design, which in a three-class arrangement will seat 380, and new underfloor options designed to ease passenger comfort

problems on long-range flights – passengers aboard the shorter, longer-range sister model A340-500 will remain in the air for up to 18 hours at a time. Alan Pardoe, director of product marketing for the A330/A340 family, says the aircraft is aimed in particular at operators of older 747-100/200/300s who want a modern replacement. Early -600 buyers fit this description.

Launch customer Virgin Atlantic – an A340-300 operator – has signed for 10 aircraft and eight options partly to replace its five 747-200s, while Lufthansa has 31 A340-300s in service and operates eight Boeing 747-200s. Pardoe adds that while it has around the same seating capacity as the Boeing 777-300ER, the -600's range is 1,110km (600nm) greater.

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Orders for the -600 stand at 47 aircraft and 28 options from seven airlines (see table), and the -500 and -600 have amassed 74 orders since programme launch in December 1997. Chief commercial officer John Leahy claims this accounts for 59% of sales in the category, including those for the Boeing 777-200LR and -300ER.

Other programmes have sold faster – the A380 is expected to have booked 100 firm orders by the end of the year, only 12 months after programme launch and five years before it enters service. But Airbus appears unconcerned. "We have a solid order book," says Leahy. "The 340-500/600 will maintain its lead and we expect to see significant interest when the -600 enters service. This aircraft will sell itself once it begins operating."

The -600 represents a major increase in capacity over the A340-300 from which it is derived. It is 10.6m (35ft) longer, providing a 31% increase in payload capacity. The new wing is 20% larger, while range, at up to 13,900km, has gone up by 5%. The result is a claimed 35% improvement in productivity which, according to Leahy, will make for an aircraft with "unsurpassed economics".

Airbus also claims that the four R-R Trent 500 powerplants will cost 13% less to maintain than the two much larger engines powering the Boeing 777, partly because the Trent 500s will operate at 56,000lb-thrust (249kN), 4,000lb less than their maximum certified thrust, stressing the engine less and giving longer component life.

The move to larger engines puts the A340 in a new performance regime compared with its CFM56-powered stablemate,

