

# Airbus Industrie A.330-300

**History:** Airbus Industrie launched the combined A330 and A340 program in June 1987 to compete with Boeing's 767 and 777 designs. The new Airbus airliners were optimised for service on long distance routes with high passenger volumes. They were the first airliners to be completely designed using CAD (computer aided design) technology. While the A340 was designed with four engines for very long range routes the twin engine A330 was designed for medium to long range routes but both versions use basically the same wings, fuselages and avionic systems. They benefited from Airbus's development of modern flight control technology for its A320 series and are equipped with fly-by-wire control systems with sidestick controllers and two-man 'glass' cockpits. The cross section of the circular fuselage is the same as the A300 and A310 series, allowing the use of the same cabin equipment and reducing design and development costs. As with earlier Airbus airliners, components are manufactured in various places - Aerospatiale manufacture the flight deck, engine pylons and parts of the central fuselage, British Aerospace manufacture the wings, Daimler-Benz Aerospace fabricate most of the



fuselage, fin and interior and CASA builds the tailplane. The components are assembled at Toulouse.

The first A330 made its maiden flight on 2 November 1992

with CF6-80E engines and later flew with the alternative engines. Certification was achieved in October 1993 and the launch airline, Air Inter, began commercial operations in January 1993. The shorter A330-200 flew in August 1997 and entered service in April 1998. Both versions have been very popular with airlines, partly because of their good performance and profitability and partly because of their commonality with so many other Airbus airliners.

Sabena (Société Anonyme Belge d'Exploitation de la Navigation Aérienne) was the Belgian national airline and the second oldest European airline after KLM. It was formed in May 1923 and commenced scheduled services in 1924, eventually flying to many European cities. In 1925 the airline made its first flight to the Belgian colonies in Africa and established a scheduled service to Leopoldville in 1938. In 1947 it commenced its first transatlantic service to New York. Although the airline operated relatively well for many years it was hobbled by its role as the Belgian flag carrier that meant the airline had to provide services that made political but not economic sense and so it was in financial trouble from the 1970s. By the beginning of the 1990s the airline was in serious trouble and the government began looking for salvation in a partnership with other airlines, beginning with a short lived arrangement with Air France between 1992 and 1994. In 1995 Swissair took a 49.5 per cent equity holding in Sabena and virtually took over its operations as well. In 1997 Sabena ordered 34 Airbus airliners that were worth more than five times the capital value of the company and, in the short term, the partnership with Swissair and the new Airbus airliners improved its performance so it made a profit and set new passenger carrying records. In April 2001 its fleet included 12 long haul and 66 medium range airliners and it employed 12,500 people around the world. However, the collapse of Swissair and the effects of the terrorist attacks in the United States brought the

airliner to a sudden collapse and it suspended operations in November 2001 in what was the worst business failure in Belgian history.

**Data:** large capacity medium to long range airliner. *Engines* two Pratt & Whitney PW4168 turbofan engines or two Rolls-Royce Trent 700 turbofan engines or two CFM International CFM6-80 turbofan engines of 600.6kN (102 960 lb) thrust. *Wing span* 60.30m (197ft 10in). *Length* 63.65m (208ft 10in). *Maximum take-off weight* 212,000kg (467,375lb). *Maximum cruising speed* 927km/h (576mph). *Range* 8334km (5178miles) with 335 passengers and reserves for diversion. *Maximum payload* 46,988kg (103,390lb). *Flight crew* 2.

#### **The kit: Revell 1:144**

Revell, being the canny company that they are, make as much use of their moulds as they can. For the A330/340 range of airliners Revell have made use of the fact that the real airliners are virtually inter-changeable to use one set of moulds as the basis for a whole range of A330s and A340s. The fuselage is for an A340-300 and the wings are for an A330 with indentations in the plastic showing you where to make holes to convert it into an A340 wing. In addition, it is not too difficult to cut plugs out of the A340-300 fuselage to make an A340-200 fuselage which is virtually the same as an A330-200 fuselage. (The difference is that A330s have a slightly larger fin than the A340s to make up for the reduced keel area of only two engines.) By supplying different engines in different versions of their A330 kits it is possible to construct most of the different A330 versions. The UTA kit comes with parts for the Pratt & Whitney engines



moulded on the main sprues and the CF8 engines on an additional sprue. All this is only encouragement for anyone mad enough to want to make more airliner kits than is good for them.

The Revell A330/340 kits are lovely to work with and really the only serious fault I have with them is that the cockpit window is too small. Consequently I ended up using a decal to at least make the window look the right size even though I would have preferred a better transparency. The kit decal sheets are fair but after market ones are generally better and seem to suit the petite nature of airliner kits better. In my case I was forced to use an after-market sheet because I confused myself about which engines went on which versions of the A330 and ended up with CF8 engines on a -300 fuselage, which was not the most common of combinations ordered by airlines. After some time cruising the internet I managed to find decals for the Sabena A330-300 that had used CF8 engines and the sheet, when it arrived from overseas, proved to be of very high quality with excellent instructions which include details on how to convert a -300 fuselage to a -200 one and how to enlarge the size of the A.330 tail fin to make the model entirely accurate. By the time the decals had arrived it was too late to make that change but I'd recommend the Skyline decal set for the instructions and the quality of the decals.

As usual for airliners these days, the finish was overall white (I've got to the state with metallic and white finishes these days that I probably prefer them to camouflage colours, which shows you how much my finishing techniques have improved over the past few years.) As usual, the most tedious part of the entire construction process was the hours of masking that went into preparing for the three or four different shades of metallic finish around the leading edges and engines. After all that was over, on went the decals with almost no fuss although I substituted some kit decals for the after market ones to maintain some similarity between the various A330/340 models I've been making because almost every different decal sheet portrays some lines and decals slightly differently. The end result is a lovely looking little airliner.