Douglas DC-9-10series

History: History will probably look back as favourably on the Douglas DC-9 and its subsequent incarnations as being as successful as the older DC-3. In fact it has turned out to be a much more versatile aeroplane than the DC-3 with increases in range and carrying capacity that were way beyond the developments that could be applied to the DC-3. As the Boeing 717 the modern DC-9 is a highly efficient airliner capable of carrying over 100 passengers at very low cost. The success of Impulse's 717s that were later taken over by QantasLink was one of the major nails driven into the Ansett coffin because that airline had no way of countering their efficiency.

The DC-9 began life as a Douglas attempt to find a niche in the jet airliner market for an airliner that had something of the capacity of the Boeing 727 but offered shorter range and therefore two engines and much cheaper operating costs. The Douglas company, long synonymous with high quality airliners, began planning this twin engine short range transport at the beginning of the 1960s, construction began on 26 July 1963 and the first DC-9 flew on 25 February 1965. In many ways it was competitor to the earlier Sud Aviation Caravalle and the contemporary BAC 111 and for some time it seemed that it would not make much impression on the market, but interest began to pick up at the end of the 1960s as airlines became more careful in their fleet selections.

The first DC-9s, the 10 series, were optimised to fly on United States east coast routes but it was the later -20 and -30 series that put the airliner on the forefront of the airline industry with additional engine power and seating capacity while still keeping the shorter range. The DC-9-30 series was perhaps the most popular, flying all around the world including with Ansett, TAA and IPEC in Australia. When Douglas was absorbed into McDonnell, largely due to financial problems in manufacturing and selling the DC-9-30s, it became the McDonnell Douglas MD-80 series with greater power, range and capacity and that became the Boeing 717 series when Boeing absorbed McDonnell Douglas. With the 717 still in production it is likely that the DC-9/717 will remain in service for decades to come. However, the old and original DC-9-10 series has generally long gone from service as it has been replaced by its more modern versions.

Data: medium capacity airliner. *Engine* two Pratt & Whitney JT8D-7 turbofan engines of 124.56kN (28000lbs) thrust *Wing span* 27.28m (89.42ft). *Length* 31.86m (104.42 ft). *Maximum take-off weight* 41 180kg (90 700lb). *Maximum cruise speed* 905km/h (560mph). *Range* 2035km (1 100 miles). *Payload* 80 passengers in two class layout and 90 in one class

configuration.

The kit: Aurora 1/72

This an ancient Aurora kit dates from 1968 which is not long after the DC-9s entered service. By the time it reached me it was in an ancient time worn box with the fuselage halves joined together but not much else done to it. I was a bit sceptical about it until I measured it and found it comes out at 1/73 or 1/74 scale, which is close enough for me.

The best way to describe this kit would be accurate but not overly detailed. There is absolutely nothing inside the fuselage halves and there are no wheel wells, the undercarriage legs plug right into the bottom of the wings and fuselage. I toyed with the idea of making wheel wells, but after ten seconds careful consideration I dispensed with that idea. The decals in the box were old and very yellowed so I tried another trick picked up at the MoB and taped them to a north facing window for a few days to let the sunlight bleach them a bit. It took some time but eventually most of the yellowing disappeared and, in comparison to what they looked like when I got them, the difference is amazing.

Since the kit is so simple putting it together was relatively simple too. First I had to separate the two fuselage halves again to put a lot of weight into the nose and paint the entire interior flat black. There were a few gaps but the kit was really very good in that department, given it's age. The trailing edges needed some work to thin them down and that proved to be a tiresome job because the plastic in the model was particularly hard, in comparison to the relatively soft plastic of more modern kits.

The kit lacked the windows above the main windscreen windows, which would have looked very odd in 1/72 scale, so I cut them out and fitted some spare transparent plastic that I later sanded to shape and then polished. The main trouble with the painting is that the kit instructions give absolutely no direction about any colours or where the decals go. This was particularly difficult for the wings which are usually a combination of grey and a couple of versions of bare metal on modern airliners. I looked at as many pictures of early DC-9s as I could find but they showed nothing. In the end I used the kit instructions for the Airfix DC-9-30 to give me an idea of how the wings probably looked - at least the end result looks more realistic than wings painted all over aluminium.

With the painting done it was time to put on the decals, which were old and tough like leather. They only conformed to curved surfaces with the greatest of encouragement but we got there, more or less, in the end. The greatest disappointment was that the red stripe down the sides of the fuselage had holes where the windows are so if everything had gone right the transparent decal over the cabin windows would have looked very effective.

Unfortunately the decals and the model are out by about a millimetre over the length of the windows, not a lot but enough to make the end result look bad. The only solution was to cut the decals out of the windows, mix exactly the right shade of red to match the decals and then fill in the windows with a replacement like Krystal Kleer. The end result wasn't bad, but it would have been better if the decals had fitted just right. Overall, the model looks pretty good and gives a good idea of the size of jet airliners in comparison to military aircraft in the same scale.