MD-11 assembly on schedule

by John Bailey in Los Angeles

Sales and reservations for the new McDonnell Douglas MD-11 have now topped the 130 mark. "Active negotiations" are under way to add to the aircraft's 19 customers.

Douglas says that it now has a total of 40 firm orders, with another 94 conditional orders, options, and reservations. When the DC-10 derivative was launched in December 1986, the company set the break-even figure at around 90 sales, though now it says that break-even is a "moving target", because of the number of new features added to meet customer requirements.

Assembly of the first aircraft, a cargo version destined for Federal Express, is on schedule, with the fuselage E-barrel about to be mated to the first set of wings. The first nose section is also complete, with the second and third now under construction.

The first MD-11, which will roll out early next year in McDonnell Douglas colours, has been designated fuselage number 447. The aircraft immediately preceding it on the Long Beach production line is the 446th DC-10, which will be the last built. It will also be the last DC (Douglas Commercial) aircraft built, ending a line which started with the DC-1 in 1933.

The last DC-10 is destined for a currently unnamed airline, with title transfer scheduled for December. The last of 60 military-variant KC-10 tankers will be handed over to the US Air Force within the next few weeks, but will remain at Douglas for development of additional wingtip hose-and-drogue systems which will give the KC-10 the capability to refuel three aircraft simultaneously.

Development should be completed by next spring.

Douglas says that all three initial versions of the MD-11 have now been sold, but it has not yet sold either the offered MD-11ER or the projected Super Stretch, which would be 35ft longer than the standard version. The standard MD-11 will be 18-6ft longer than the 182ft DC-10, and will have a maximum range of up to 8,070 miles with 323 passengers. Depending on configuration, the aircraft will seat between 276 and 405 passengers.

One intriguing innovation Douglas is considering for both the standard MD-11 and the Super Stretch is an additional below-deck passenger cabin, designated the Panorama Deck. The cabin would be situated in the forward position of the cargo hold, and would seat either 46 business-class passengers or 66 in economy configuration on the standard MD-11. On the stretched version, the Panorama Deck would accommodate 62 business-class or 94 economy passengers.

The cabin's 10ft floor width is approximately the same as that of the MD-80, but its position in the belly of the fuselage gives an illusion of extra space, owing to the outward-sloping side panels. These also allow additional storage space between the window seat and the side panel, and in the overhead bins. No airlines have yet ordered the extra passenger compartment.

A further innovation claimed by Douglas is the "super flex" interior, which, it says, will allow airlines to complete major interior reconfigurations within 18hr. All the galleys will be movable, and passenger lavatories will be connected to a new vacuum waste disposal system with inlets throughout the cabin, allowing the cubicles to be placed anywhere. Douglas is scheduling five days for complete installations of the interior during assembly.

Certification flight-testing will start early next year, with certification planned for March 1990. Douglas says that the first delivery will be in April 1989.

- MD-11 launch customer Federal Express has stayed with General Electric CF6-80C2 engines for its two additional aircraft. A fifth MD-11 is on option, with delivery positions reserved for five more. Recent CF6-80C2 orders include engines for 15 more Boeing 747-400s for Japan Air Lines, taking its total to 20 aircraft. East Germany's Interflug has become the first eastern European customer for the GE engine, with a $55 million order for its three Airbus A310-300 aircraft.

Douglas holds back on propfan launch

McDonnell Douglas has still not set a formal launch date for the new-generation MD-91/92 propfan project, saying that it needs firm orders before it takes the plunge.

To date, three airlines (SAS, Delta, and Midway) have taken options to convert existing orders for MD-80 series aircraft to the derivative propfan-powered MD-91 or MD-92, but none has yet put in a firm order.

Douglas says that it is currently engaged in "active technical marketing" of the project, and is working with between ten and twelve potential customers to refine features. Once the launch decision has been taken, the aircraft should be ready for commercial service within four years.

The MD-80 ultra-high-bypass testbed aircraft, on which one General Electric GE36 gearless unducted fan replaced a conventional turbofan, is still undergoing flight-testing on a leased site at Edwards Air Force Base in California. The company hopes to take the aircraft to next month's Farnborough Air Show, but no final decision has been made.

A second test engine, the Pratt & Whitney Allison 578D gearless propfan has undergone bench testing, and will be fitted to the testbed MD-80 within the next few months.

Douglas is optimistic of receiving firm orders before the end of the year, and says: "Regardless of what you think the price of fuel will be in the mid-1990s, this aeroplane will offer dramatic fuel-efficiency improvements". The claimed savings for the MD-91/92 are in the region of 40 per cent over the fuel-burn of the MD-80 series.

The MD-91 and MD-92 differ only in fuselage length and seating, with the smaller MD-91 being the same size as the conventional turboprop powered MD-87. The MD-92 will be approximately 28ft longer, with mixed-class seating for 165 passengers. The planned range for both aircraft is 2,800 miles.

RAAF plans "flying pilot" scheme

The Royal Australian Air Force has concluded that its pilots joined to fly, and is to set up a "flying stream" scheme to help stem the flow of premature resignations by disaffected pilots.

In the last financial year 123 RAAF pilots left the service, 73 of whom were considered to be premature resignations. This was three times the average resignation rate of the last ten years.

In a bid to stem the flow of pilots to better-paid civilian jobs, the Minister for Defence Science and Personnel, Ros Kelly, set up a "stay-in" bonus scheme awarding a taxable $A70,000 payment to those pilots who agreed to stay in the RAAF for at least six years.

Now Kelly is considering a second proposal, that pilots who enter a specific "flying stream" will be guaranteed a flying post for five years at the same base. This would provide both flying, for which most pilots joined the Service, and family stability, but at the expense of foregoing promotion.

Under the present scheme aircrew officers are expected to complete at least one ground tour in an administrative position to ensure promotion and to qualify for staff college. Most air forces consider this a normal "career enhancing" step.

The prospect of a stable home life is designed to appeal to middle-rank married officers who face pressure to resign when continual moves start to interfere with their children's schooling and wife's job.

The two-tier bonus/flying scheme would increase the overall pilot experience level, as they would first have to complete their initial minimum engagement of eight years' service, at which point they would qualify for the $A70,000 retention bonus in return for another six years' service. The pilots could then opt for the flying stream for five years, thus giving a minimum of 19 years' flying.

at the expense of foregoing promotion.

Under the present scheme aircrew officers are expected to complete at least one ground tour in an administrative position to ensure promotion and to qualify for staff college. Most air forces consider this a normal "career enhancing" step.

The prospect of a stable home life is designed to appeal to middle-rank married officers who face pressure to resign when continual moves start to interfere with their children's schooling and wife's job.

The two-tier bonus/flying scheme would increase the overall pilot experience level, as they would first have to complete their initial minimum engagement of eight years' service, at which point they would qualify for the $A70,000 retention bonus in return for another six years' service. The pilots could then opt for the flying stream for five years, thus giving a minimum of 19 years' flying.