

A300 fleet analysis

There are less than 100 A300B2/B4s in operation. Two-thirds of these are freighter-configured -200 series aircraft. Most of these are owned, and this will keep supply tight.

Of the 248 A300B2/B4s delivered between 1973 and 1985, only 98 aircraft are currently active and 21 are stored. A summary of the aircraft delivered, still active and in storage is given (see table, this page). While the 21 stored aircraft are officially available, the maintenance status of most is at a level where they are unlikely to operate again.

Since original delivery, 73 aircraft have been converted from passenger configuration to freighter. These aircraft were converted using either the BAE Aviation Services (39 aircraft) or DASA (34 aircraft) passenger-to-freighter modification in the mid- and late-1990s. All aircraft were A300B4-103/-203s powered by CF6-50C2 engines, of which 63 were -203s and only 10 were -103s. There are also two A300C4s and two A300F4s in active service.

Of the current fleet of 98 aircraft, 66 operate in freighter mode and only 32 in passenger configuration.

There are several major structural inspections which have high associated costs. These inspections have initial and

repeat inspection intervals based on flight hours (FH) and flight cycles (FC).

One of the most important of these is the Frame 47 inspection, which relates to fatigue in the wing root area. The initial inspection has a threshold of 16,700FC and then repeat intervals of 9,400FC. Most aircraft have been operated at average cycle times in the range of 75-120 minutes. Many aircraft have operated at annual utilisations of 2,000-2,500FH.

The Frame 47 inspection requires a non-destructive test and it is estimated that repairs can result in a downtime of 30-35 days and incur a cost of about \$0.5 million.

A second major inspection is the Rib 5 inspection for cracks in the fifth rib of both wings. This concerns cracking on the forward landing gear attachment. Modifications on discovery of cracks can result in high costs for rectification (see *A300B2/B4 modification & upgrade programmes, page 14*).

Another major ageing inspection relates to the replacement of bolts on the wing bottom skin. This is due at

25,000FC and costs about \$150,000 to complete (see *A300B2/B4 modification & upgrade programmes, page 14*).

The findings and potential costs of these structural modifications have forced the retirement of many A300B2/B4s, and determine whether aircraft that are still in service will continue to be operated.

A300B2 series

There are still 13 A300B2 series aircraft in service, including six A300B2K-103s in operation with Fly Air of Turkey and Japan Airlines (JAL) Domestic. These were all originally delivered to TOA Domestic Airlines, with three aircraft being retained by JAL Domestic.

Eight A300B2-203s were delivered to Iran Air, of which four are the only examples of the type remaining in operation.

Only two of five A300B2K-203s delivered remain in service. These are with Turkish charter carriers Onur Air and SAGA Airlines. Besides Turkish carriers, there is little demand for A300B2s.

A300B4 series

Of 41 A300B4-103s built, 11 remain in service and three are in storage. Of the 11 in operation four remain in passenger configuration. These are ex-Thai and ex-Eastern aircraft operated by Mahan Air in Iran and Onur Air in Turkey. These aircraft were built between 1977 and 1979 and have accumulated 46,000-66,000 FH and 26,000-27,000 FC.

There are seven converted A300B4-100Fs in operation. Three of these are BAe Aviation Services-converted aircraft operated by Astar Cargo and TNT Express. The other four are DASA-converted aircraft operated by Channel Express and Air Contractors. These were built between 1979 and 1982 and have accumulated 34,000-46,000FH and 20,000-30,000FC.

A further two converted ex-Eastern DASA-converted A300B4-103Fs are in storage, and one more A300B4-103F is retired.

Of all remaining A300B2/B4s, only three aircraft powered by JT9D-59A engines are potentially available. These are three ex-SAS A300B4-120s now owned by Turkish carrier Bosphorus, but they are in storage and are unlikely to be operated again.

A300B4-200 series

Of all remaining A300B2s/B4s in service and in storage, the A300B4-200 series forms the largest and most important group. The A300B4-200 has the high gross weight and longest range

SUMMARY OF A300B2/B4 PRODUCTION & IN-SERVICE AIRCRAFT

Aircraft variant	Number built	Number in service		Number stored
		Pax	Freighter	
A300B2-101/103	30	1		
A300B2K-103	8	6		
A300B2-203	9	4		
A300B2-203FF	3			
A300B2K-203	5	2		
A300B4-103	41	4	7	3
A300B4-120	10			3
A300B4-203	119	13	55	15
A300B4-203FF	3	2		
A300B4-220	6			
A300B4-220FF	9			
A300C4-203	3		2	
A300F4-203	2		2	
Total	248	32	66	21

The majority of A300B2/B4s in operation are A300B4-203Fs. These are mainly owned aircraft and are used on low utilisation, short-cycle overnight operations. These aircraft fill a niche on account of the combination of their low capital cost and high freight capacity. Their operators are therefore unlikely to replace them in the short-term. This will keep supply tight.



capability, and is also the youngest group of aircraft in the remaining fleet.

Of the 73 aircraft converted to freighter, 63 were A300B4-203s. A fleet of 13 passenger-configured A300B4-203s remains in operation. These are aircraft built between 1980 and 1983 that have accumulated 36,000-52,000FH and 19,000-40,000FC. These are operated by several carriers, including Turkish carriers Fly Air, Onur Air and MNG Airlines. Other operators include JAL Domestic, Mahan Air and Ariana.

A further nine passenger-configured A300B4-203s are in storage, formerly operated by Pakistan International Airlines (PIA) and Indian Airlines.

The 63 A300B4-203s that were converted to freighter were mainly sourced from Air France, Lufthansa, Alitalia, Egyptair, Thai, Malaysian Airline System, Eastern Airlines and Pan Am. Two of these aircraft are out of service, and another six ex-Alitalia and ex-Air France aircraft are stored. These are C-S Aviation aircraft and have accumulated 24,000-52,000FH and 20,000-22,000FC.

The largest group of A300B4-203Fs totals 55 units which are active. This is split between 25 DASA-converted aircraft and 30 BAe Aviation Services-converted aircraft.

These were built between 1975 and 1983 and most have accumulated 25,000-50,000FH and 15,000-32,000FC. These are operated by freight carriers around the world.

Operators of DASA-converted aircraft include Channel Express, DHL subsidiary European Air Transport, Express.Net, Dragonair and Egyptair.

Operators of BAe Aviation Services-converted aircraft include Astar Cargo, TNT Airways, MNG Airlines, Aerounion, Tradewinds, and Air Macau.

Two ex-Finnair A300B4-203FFs operate with MNG Airlines, two A300C4-203s are in service with MNG Airlines and ACT Airlines of Turkey, and the two original A300F4-203s are also in service with MNG Airlines.

The largest freighter-configured fleets are operated by DHL subsidiary European Air Transport. This has a fleet of 12. These are all freighter-converted A300B4-203Fs, and is the largest A300B4-203F fleet in operation.

Express.Net has the second largest fleet, with eight aircraft. MNG Airlines and Tradewinds both operate seven. All other A300B4-100F/-200F fleets are small. Channel Express operates three, TNT Express has a fleet of six, Astar Air cargo flies five for DHL in the US, Air Contractors has a fleet of three, and Aerounion also operates three. Egyptair also flies two of its own converted aircraft.

Turkish carriers

The A300B2/B4 has proved popular with airlines in Turkey. A fleet of 29 aircraft is operated by six different carriers. These include MNG Airlines, Kuzu, Onur Air, Fly Air, Saga Airlines and freight operator ACT. This fleet is also due to expand. Three A300B4-120s were also operated by Bosphorus, but are now in storage and are unlikely to fly again.

MNG Airlines has the largest fleet, with 10 aircraft. This comprises four

A300B4-2043Fs, converted freighters that were previously operated by Air France, Alitalia and Singapore Airlines (SIA). It also operates one of two A300C4-203s built, previously operated by South African Airways. This aircraft is also used as a freighter.

MNG Airlines also operates both aircraft built as A300F4-203s, originally operated by Korean Air. These two also operate as freighters. This takes MNG's fleet of freighter aircraft to seven.

MNG Airlines also operates three aircraft in the passenger role. One is an A300B4-203, originally operated by SIA. The other two are A300B4-203FFs, originally operated by Finnair.

MNG is also due to add two more aircraft to its fleet. These are a passenger-configured aircraft, that was previously operated by Pakistan International Airlines, and a DASA-converted freighter. MNG has also bought another two aircraft for parts salvage.

Onur Air and Fly Air have the next largest fleets, with 13 aircraft between them. Fly Air's fleet includes three passenger-configured A300B2K-103s and three passenger-configured A300B4-203s. Onur has one A300B2 and four A300B4s. Saga Airlines is a new carrier, and operates a single A300B2K.

Kuzu Airlines and ACT are Turkey's other major freight carriers.

Other additions to Turkey's freighter fleet include one more aircraft for Fly Air and two for a new carrier. When these, and MNG's additions have been accounted for, the combined Turkish fleet will total 34 aircraft. This will account for a full third of the active A300B2/B4s. [AC](#)