

**Aviation Safety Investigation Report
199603045**

**Airbus
A320
Airbus
A300-B4-203**

24 September 1996

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A Boeing 737, enroute to Brisbane and an A300 enroute to Sydney, both departed from RWY 27 at Tullamarine via a DOSEL 4 standard instrument departure (SID) with a requirement to maintain 5,000 ft. This was to accommodate an AC50 which had departed Essendon on track to Horsham via overhead Melbourne. After vertical separation was achieved between the AC50 and the two jets, the pilot of the AC50 was instructed to turn onto a heading of 280 degrees and the crew of the Boeing 737 instructed to initially climb to 6,000 ft and then 7,000 ft as the levels became available. When these two aircraft were laterally clear of one another, the Boeing 737 was cleared to climb to FL200. The A300 was maintained at 6,000 ft.

Shortly after, the controllers attention was drawn to a potential conflict between the Boeing 737 and an inbound SA227 from Mildura. The trainee turned his attention to an inbound A320 tracking via a 27 ARBEY STAR assigned 6,000 ft. This aircraft was now in conflict with the A300 which was maintaining 6,000 ft and was turning right in compliance with the DOSEL 4 SID. The training officer recognised the conflict and told the trainee to instruct the crew of the A300 to climb. For reasons unknown, the trainee did not instruct the A300 to climb - nor did the training officer choose to use the 'B' System handset, which would have enabled him to override the trainee's communications, and climb the A300.

The trainee then instructed the A300 to turn left onto 340 degrees. Both the trainee and the training officer agreed that the aircraft seemed to be slow in commencing the turn. Because of this, the crew was further instructed to turn immediately onto a heading of 310 degrees and the crew of the A320 to turn left immediately heading 090 degrees. The pilot of the A320 reported sighting the A300 and the two aircraft passed within 2 NM at the same level. There was a breakdown of separation.

ANALYSIS

The 27 DOSEL 4 SID does not provide separation assurance with the 27 ARBEY STAR once the departing aircraft climbs above 5,000 ft. In such instances, controllers are required to ensure that the vertical separation is maintained until lateral separation is established.

Neither the trainee nor the training officer applied separation assurance techniques. The controllers relied upon the performance of the A300 to climb above incoming aircraft. However, because of the AC50 from Essendon, which was tracking overhead Melbourne, the A300 was held at 6,000 ft, resulting in a lower altitude than normal at the position at which the DOSEL 4 SID requires a turn. In resolving the conflict between the AC50 and the A300, the controllers failed to recognise in time the conflict between the A300 and the A320.

SIGNIFICANT FACTORS

1. The training officer was inexperienced in the approach departures training role.
 2. The training officer chose not to use an override system for radio transmissions.
 3. The training officer failed to adequately monitor the trainee and to correct the situation as it developed.
 4. Neither controller applied adequate separation assurance techniques.
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