

**Aviation Safety Investigation Report
198600898**

A300 Airbus

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28 September 1986

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 198600898 **Occurrence Type:** Incident
Location: Approximately 450km SW of Ceduna SA
Date: 28 September 1986 **Time:** 2032
Highest Injury Level: Nil
Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	0	0
Ground	0	0	0	-
Passenger	0	0	0	0
Total	0	0	0	0

Aircraft Details: A300 Airbus	A300 Airbus
Registration: VH-TAB	VH-TAD
Serial Number:	
Operation Type: Regular Public Transport	Regular Public Transport
Damage Level: Nil	Nil
Departure Point: Perth WA	Melbourne VIC
Departure Time: N/A	
Destination: Melbourne VIC	Perth WA

Approved for Release: October 30th 1986

Circumstances:

VH-TAB was eastbound from Perth to Melbourne. VH-TAD was westbound Melbourne to Perth. The eastbound aircraft was initially flying air route T6/T10 at Flight Level 330 (FL 330) and the westbound aircraft on an air route further to the south, T15 at FL 310. When the eastbound aircraft passed position T6E the Adelaide Sector One controller contacted Perth Sector with a request that the eastbound aircraft be asked if it would accept clearance to track direct from position T6D to Mr William on track T10. (See attached chart) T6D direct Mt William represents a short cut compared with the standard route T6T10. The eastbound aircraft accepted the revised track at 1925. At the time of the track change the Adelaide Sector was being operated by a 'controller-under-training' and the rated training controller for the sector was away from his position taking a meal break. However, before going for the meal break the controllers had discussed "track shortening" for both aircraft. Track shortening was not offered to the Westbound aircraft because problems may result with radio communications if aircraft are given routes to the South of T15. The short cut took the eastbound aircraft further to the south than the standard route and eliminated the lateral separation between the tracks of the two aircraft. When the rated controller returned to duty from his meal break the trainee 'handed over' the Sector and went to dinner. A short time later, at 2006 hours, the westbound aircraft reported at position T15B and requested climb to FL 330. This report was relayed to the Adelaide Sector One controller who then cleared the aircraft to FL 330. Each aircraft was on a different radio frequency and each was unaware of the position and altitude of the other. At about 2032 hours, the pilot of the eastbound aircraft observed an aircraft approaching and turned on more of his lights. The pilot of the westbound aircraft responded in a similar manner. The crews report the aircraft appeared to pass at about the same level and within two kilometres laterally. The trainee controller who offered the 'track shortening' for the eastbound aircraft was aware that he was giving away the lateral separation existing between the normal eastbound and westbound routes, and he was conscious that the vertical separation, which existed, had to be maintained. One of the functions of ATC is that of

expediting the flow of air traffic. Controllers at Adelaide believed that track shortening saved the airlines considerable sums of money. However the 'T' route structure across the Great Australian Bight is designed to provide the most direct routes possible while laterally separating eastbound and westbound traffic. Short-cuts on these routes will result in insignificant savings in flight time. Furthermore, the loss of lateral separation can preclude the use of optimum cruise levels. The saving, in flight time, for the eastbound aircraft involved in this incident would have been about one minute. When the rated controller returned from his meal break the traffic situation was explained to him and he was made aware that the eastbound aircraft had been given track shortening. This information was also displayed on the flight progress board. Nevertheless, when the westbound aircraft requested FL 330 the controller cleared the aircraft at that amended level in the belief that the required lateral separation would exist at the time the aircraft passed each other. Following the investigation, safety recommendations have been made. These have led to a review of training, checking and supervision procedures for controllers and to track shortening being prohibited on 'T' routes outside of radar cover, except when requested by aircraft for operational-safety reasons.