

**Aviation Safety Investigation Report  
199602961**

**Boeing Co  
B737  
Boeing Co  
B737-400**

**17 September 1996**

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

**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](http://www.atsb.gov.au).**

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

<b>Occurrence Number:</b>	199602961	<b>Occurrence Type:</b>	Incident
<b>Location:</b>	19km SW Melbourne, Aerodrome		
<b>State:</b>	VIC	<b>Inv Category:</b>	4
<b>Date:</b>	Tuesday 17 September 1996		
<b>Time:</b>	1158 hours	<b>Time Zone</b>	EST
<b>Highest Injury Level:</b>	None		

<b>Aircraft Manufacturer:</b>	Boeing Co		
<b>Aircraft Model:</b>	737-476		
<b>Aircraft Registration:</b>	VH-TJM	<b>Serial Number:</b>	24438
<b>Type of Operation:</b>	Air Transport High Capacity Passenger		
<b>Damage to Aircraft:</b>	Nil		
<b>Departure Point:</b>	Melbourne, VIC		
<b>Departure Time:</b>	1156 EST		
<b>Destination:</b>	Hobart, TAS		

<b>Aircraft Manufacturer:</b>	Boeing Co		
<b>Aircraft Model:</b>	737-376		
<b>Aircraft Registration:</b>	VH-TAZ	<b>Serial Number:</b>	23491
<b>Type of Operation:</b>	Air Transport High Capacity Passenger		
<b>Damage to Aircraft:</b>	Nil		
<b>Departure Point:</b>	Perth, WA		
<b>Departure Time:</b>			
<b>Destination:</b>	Melbourne, VIC		

**Approved for Release:** Tuesday, February 18, 1997

#### FACTUAL INFORMATION

A B737 was inbound to Melbourne via a WENDY 1 standard arrival route (STAR). A busy departure and arrival sequence had just finished and the Inner North sector controller accepted responsibility for the Inner West sector. This was normal practice when aircraft numbers within a sector reduced such that sectors could be combined at a single control position. The B737 was in the Inner West airspace and was the only additional aircraft that now came under the control of the Inner North sector controller. The planner position associated with the Inner North sector position was not manned.

The Inner North sector controller became distracted with a number of tasks at the position and with other aircraft in the sector and forgot to pass the radar identification of the B737 to the next control position; Departures South. The transfer of aircraft radar identification between the two positions is normally conducted between 35 NM and 40 NM from the aerodrome. This ensures that the next controller is aware of the position of inbound aircraft and can plan the separation with traffic in his sector prior to the aircraft entering the area.

At the time, the Flow controller had not annotated the flight progress strip (FPS) for the inbound B737 with a landing time. The FPS was located adjacent to the Departures South position to enable controllers to appreciate the sequence of arriving aircraft. The Flow controller handed over responsibility to another controller. The new Flow controller observed the inbound B737 on the radar display but did not annotate the FPS with a landing time.

The inbound B737 was maintaining 8,000 ft and was 20 NM from the aerodrome. The Inner North controller noticed that he had not transferred the inbound B737 and instructed the crew to call Departures South. The Inner North controller then electronically transferred the identification of the aircraft to the Departures South position. This was contrary to air traffic control procedures. The controller transferring responsibility for an aircraft must receive notification of acceptance of the aircraft, either by voice or electronically, from the controller receiving the aircraft prior to instructing the aircraft to call. The Inner North controller did not advise the Departures South controller of the late transfer of the radar identification and transfer of the inbound B737.

The Departures South controller was busy with other aircraft in the sector and monitoring the departure of a B737 on a Cowes standard instrument departure (SID) from runway 27. This aircraft had been initially assigned climb to 5,000 ft. The Departures South controller did not observe the inbound B737 within his area of responsibility and approved the outbound B737 to climb to flight level (FL) 200. When the crew of the inbound B737 contacted Departures South, the controller recognised the potential conflict and instructed the outbound B737 to maintain 7,000 ft. The crew of the outbound B737 were unable to arrest the rate of ascent until the aircraft had reached 7,600 ft. The Departures South controller issued traffic information to the crew of the inbound B737 about the other aircraft. The crew were able to observe the outbound B737 and maintain visual separation until radar separation was regained.

The two aircraft passed with vertical separation of 400 ft and horizontal separation of 2 NM. The separation required was 1,000 ft vertically or 3 NM horizontally. There was a breakdown in separation.


## ANALYSIS

The Inner North controller became distracted with other aircraft in his sector and did not transfer the identification of the inbound B737 to the Departures South controller as required by local instructions. Consequently, the Departures South controller was not aware of the inbound B737 as the aircraft entered his sector.

The lack of a landing time on the flight progress strip was a missing cue that may have alerted the Departures South controller to the inbound B737. The reason for the landing time not being annotated on the flight progress strip could not be ascertained.

The Departures South controller did not observe the inbound B737 enter his airspace prior to instructing the outbound B737 to climb to FL200. Had he maintained a more regular scan of the display it is possible that he would have observed the inbound B737 entering his sector.

---



When the Inner North controller became aware that the inbound B737 had entered the Departures South sector without a transfer of the aircraft's identification, he should have contacted the controller on the intercom. This would have alerted the Departures South controller to the presence of the inbound B737 and may have enabled separation to be maintained between the two B737s

#### SIGNIFICANT FACTORS

1. The Inner North controller did not pass the radar identification to the Departures South controller prior to the inbound B737 entering the latter's airspace.
2. There was no landing time annotated on the flight progress strip for the inbound B737 for the Departures South controller.
3. The Departures South controller did not observe the inbound B737 entering his sector.
4. The Inner North controller transferred the inbound B737 to the Departures South controller prior to conducting radar co-ordination.

