

**Aviation Safety Investigation Report  
199402371**

**Boeing Co  
B747  
Boeing Co  
B747**

**25 August 1994**

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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.

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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](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.

**Occurrence Number:** 199402371                      **Occurrence Type:** Incident  
**Location:** 1860km N Perth  
**State:** WA    **Inv Category:** 4  
**Date:** Thursday 25 August 1994  
**Time:** 2254 hours                      **Time Zone** WST  
**Highest Injury Level:** None

<b>Aircraft Manufacturer:</b>	Boeing Co		
<b>Aircraft Model:</b>	747-438		
<b>Aircraft Registration:</b>	VH-OJK	<b>Serial Number:</b>	25067

**Type of Operation:** Air Transport High Capacity International Passenger  
Scheduled  
**Damage to Aircraft:** Nil  
**Departure Point:** Changi Singapore  
**Departure Time:** 2042 WST  
**Destination:** Sydney NSW

<b>Aircraft Manufacturer:</b>	Boeing Co		
<b>Aircraft Model:</b>	747-400		
<b>Aircraft Registration:</b>	9V-SKN	<b>Serial Number:</b>	

**Type of Operation:** Air Transport High Capacity International Passenger  
Scheduled  
**Damage to Aircraft:** Nil  
**Departure Point:** Changi Singapore  
**Departure Time:** 2038 WST  
**Destination:** Melbourne VIC

**Approved for Release:** Thursday, September 29, 1994

Two heavy, international passenger aircraft were approaching Australia from the North West. Whilst they were in airspace under the control of the Perth Sector 2 Air Traffic Controller, communication with the aircraft was being provided by a Flight Service Officer manning the Perth Flight Information Service International 1 position. The lead aircraft requested a climb and was cleared to Flight Level 310. The following aircraft also requested a climb and the Air Traffic Controller passed a clearance to the International Flight Service Officer indicating that the aircraft was cleared to Flight Level 290. Shortly after the following aircraft commenced climbing, the lead aircraft advised that the TCAS system had indicated that there was an aircraft behind and below presenting a confliction.

The Flight Service Officer had incorrectly passed a clearance to the following aircraft for a climb to Flight Level 310 instead of Flight Level 290, and the following aircraft was detected and reported by the lead aircraft. The following aircraft descended to Flight Level 290.

The Flight Service Officer had written the correct clearance on the flight strips but had passed the incorrect level to the aircraft. The officer could not explain this, however the investigation identified some preconditions which may have contributed to the occurrence.

- a. The incident occurred during the last five minutes of the Flight Service Officer's ten hour shift which was due to conclude at 2300 hours. The Flight Service Officer had spent the entire shift, with appropriate breaks, working on the same operating position. Normal procedure is to attempt to rotate staff through different positions.
- b. The workload, which had been light earlier in the shift, peaked just prior to the incident and was heavy and complex at the time of the incident.
- c. The Shift Supervisor's workload monitoring process did not detect that the Flight Service Officer's workload had become complex and heavy and that he may have been in need of assistance.
- d. The Air Traffic Controller working Sector 2 did not note the incorrect clearance, given by the Flight Service Officer, although the information was available through a Flight Service monitoring facility (part of the safety net) available to and used extensively by him prior to the incident. It is probable that the Air Traffic Controller's workload had also reached a point where he was unable to provide a monitoring service.
- e. A number of environmental and organisational issues were reported as having developed from the uncertainty of the continued operation of the Flight Service organisation following the Civil Aviation Authority's airspace review. Areas such as inadequate working conditions and low staff morale were reported as major issues.

### Safety Action

The Civil Aviation Authority are planning to resolve rostering and supervision issues by implementing the "team" concept for staffing within Flight Service centres. They are also employing contract staff in an attempt to reduce the load on their permanent staff.

