

**Aviation Safety Investigation Report  
199601853**

**Boeing Co  
B747  
Lockheed Georgia Co  
Hercules**

**09 June 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> 199601853	<b>Occurrence Type:</b> Incident
<b>Location:</b> 20km WNW Sydney, Aerodrome	
<b>State:</b> NSW	<b>Inv Category:</b> 4
<b>Date:</b> Sunday 09 June 1996	
<b>Time:</b> 0920 hours	<b>Time Zone:</b> EST
<b>Highest Injury Level:</b> None	

<b>Aircraft Manufacturer:</b> Boeing Co	
<b>Aircraft Model:</b> 747	
<b>Aircraft Registration:</b> N204AE	<b>Serial Number:</b>
<b>Type of Operation:</b> Air Transport High Capacity International Passenger Scheduled	
<b>Damage to Aircraft:</b> Nil	
<b>Departure Point:</b> Melbourne, Vic	
<b>Departure Time:</b> 0830 EST	
<b>Destination:</b> Sydney, NSW	

<b>Aircraft Manufacturer:</b> Lockheed Georgia Co	
<b>Aircraft Model:</b> C-130	
<b>Aircraft Registration:</b>	<b>Serial Number:</b>
<b>Type of Operation:</b> Air Transport High Capacity International Passenger Scheduled High Capacity International Passenger Scheduled	
<b>Damage to Aircraft:</b> Nil	
<b>Departure Point:</b> Richmond, NSW	
<b>Departure Time:</b> 0920 EST	
<b>Destination:</b> Canberra, ACT	

**Approved for Release:** Friday, November 8, 1996

A military Hercules (C130) aircraft had departed Richmond, NSW for Canberra, ACT and was initially assigned climb to 6,000 ft by Departures South control (DepS). The intention of the controller was to climb the C130 to be at a level above that required for arriving aircraft to have vacated on descent, by the crossing point of the tracks. Such a climb would have required the C130 to reach 9,000 ft before the respective tracks came into conflict.

A Boeing 747 (B747) was inbound to Sydney, NSW on a flight from Melbourne, Vic. and had been assigned descent to 6,000 ft, via an appropriate standard arrival route, by Approach South control (AppS).

As the two controllers radar vectored their respective aircraft, the Departures North controller (DepN) observed that the aircraft were coming into conflict and alerted both the AppS and DepS controllers. Radar vectors and traffic information were given to the crews of both aircraft and they passed within 2 NM of each other at the same height. The separation standard is 3 NM in this situation and, therefore, a breakdown of separation occurred.

Sydney airspace is divided into various areas of jurisdiction and, in this case, AppS had descended the B747 in accordance with this airspace management agreement. However, the controller did not notice that the C130 was at an inappropriate altitude and in his area of responsibility.

The DepS controller had a choice of methods that he could use to separate the C130 from arriving traffic. He could have instructed the C130 to maintain 5,000 ft, ie 1,000 ft beneath the allocated arrival altitude, or, as he chose in this case, he could have directed the C130 to climb to an altitude above that required by the arrival procedure.

The workload and complexity of the traffic situation for the DepS controller was high, and although his plan of action was sound, he forgot to instruct the C130 to climb.

#### SIGNIFICANT FACTORS

1. The workload and complexity of the task of the DepS controller were high.
2. The DepS controller forgot to take the action which would have guaranteed the separation between the B747 and the C130.
3. The AppS controller did not notice that the C130 was at an inappropriate altitude for its track.

