

**Aviation Safety Investigation Report  
199502114**

**Boeing Co  
B747**

**11 July 1995**

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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:** 199502114                      **Occurrence Type:** Incident  
**Location:** Brisbane, Aerodrome  
**State:** QLD    **Inv Category:** 4  
**Date:** Tuesday 11 July 1995  
**Time:** 0311 hours                                      **Time Zone** EST  
**Highest Injury Level:** None

**Aircraft Manufacturer:** Boeing Co  
**Aircraft Model:** 747-200  
**Aircraft Registration:** EI-BZA                      **Serial Number:**  
**Type of Operation:** Air Transport Passenger  
**Damage to Aircraft:** Minor  
**Departure Point:** Brisbane  
**Departure Time:** 0311 EST  
**Destination:** Manilla

**Approved for Release:** Friday, August 11, 1995

The B747-200 aircraft was departing runway 19 at Brisbane for Manila. As the aircraft rotated for take-off, tower controllers observed smoke coming from the left inner body main wheel tyres. Closer examination of the landing gear using binoculars, showed substantial damage and tyre loss to at least two of the main wheel assemblies. The crew was advised of the situation and elected to continue to the planned destination. Advice was received later the same day that the aircraft had landed safely.

Runway 19 was later closed for several hours after inspection revealed the presence of several large pieces of tyre tread, and a significant quantity of tyre debris. The debris covered almost the entire length of the runway. A small section of the left gear door actuating rod was also found on the main runway.

The investigation confirmed that two tyres on the left inner body gear had failed. Marks on the taxiway showed that the first tyre was flat approximately 500 metres before lining up at the departure threshold. The second tyre had burst 5 metres into the take-off roll. There were score marks on the main runway, from both wheels rims, for a distance of 1350 metres.

Specialist examination of the recovered tread section for both tyres, showed that both had failed as result of tread delamination. This report advised that the cause for the first delamination was a sudden loss of inflation pressure, most likely caused by foreign object damage. The second tyre delaminated as a consequence of overload due to the first failure. Information received from the operator shows that one of the failed tyres was retreaded on three previous occasions, and the other tyre had been retreaded five times.