Aviation Safety Investigation Report 199702183

Boeing Co
B767

06 July 1997

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.

Aviation Safety Investigation Report

199702183

Occurrence Number:	199702183	**Occurrence Type:**	Incident
Location:	Brisbane, Aerodrome		
State:	QLD	**Inv Category:**	4
Date:	Sunday 06 July 1997		
Time:	1021 hours	**Time Zone**	EST
Highest Injury Level:	None		

Aircraft Manufacturer:	Boeing Co
Aircraft Model:	767-300
Aircraft Registration:	ZK-NCH **Serial Number:**
Type of Operation:	Air Transport High Capacity International
Damage to Aircraft:	Minor
Departure Point:	Brisbane. Qld
Departure Time:	1015 EST
Destination:	Kansai Japan

Approved for Release: Monday, September 29, 1997

Shortly after takeoff, the crew of the Boeing 767 were advised by ATC that tyre debris and part of a control pulley had been found on the departure runway. The crew advised that they would return to land after jettisoning fuel to reach maximum landing weight. The crew later declared an emergency due to aircraft control difficulties. A distress phase was initiated by ATC. When emergency services were in position, the airport was closed to all other operations and the aircraft landed safely.

A subsequent inspection of the aircraft revealed that the tread of the inner rear tyre on the right main landing gear had separated, although the tyre had remained inflated. Liberated rubber debris had entered the right wheel well, damaging a pulley and its mounting bracket in the right inboard aileron control system. This led to a loss of function of the right inboard aileron due to a reduction of aileron cable tension.

Investigation of the tyre failure by the tyre manufacturer concluded that the failure was the result of the loss of rubber adhesion to the casing plies below the buff line. The tyre was on its fifth retread and had been subjected to nine landings since the last retread.

The aircraft manufacturer reported that redundancies built into the aircraft control system provided sufficient remaining lateral control, despite the loss of right inboard aileron function.