

**Aviation Safety Investigation Report
198602326**

Boeing 747SP-21

23 May 1986

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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.

Occurrence Number: 198602326
Location: Sydney(Kingsford-Smith) NSW
Date: 23 May 1986
Highest Injury Level: Nil
Injuries:

Occurrence Type: Accident
Time: 1050

	Fatal	Serious	Minor	None
Crew	0	0	15	15
Ground	0	0	0	-
Passenger	0	0	0	54
Total	0	0	0	69

Aircraft Details: Boeing 747SP-21
Registration: N531PA
Serial Number:
Operation Type: Regular Public Transport
Damage Level: Substantial
Departure Point: Melbourne VIC
Departure Time: 1050
Destination: Sydney NSW

Approved for Release: March 23rd 1988

Circumstances:

After an apparently normal approach the Captain and First Officer reported a firmer landing than expected. Towards the latter part of the landing roll the crew noticed that the aircraft had a slight list to the left. While the aircraft was being turned off the runway the "left wing door open" warning light illuminated. This was followed by an indication of a reduction in the hydraulic fluid quantity in the number 4 system. The appropriate check list was completed and the aircraft was taxied to the terminal. As the aircraft approached its designated parking position the engineering ground crew noticed that a section of the left wing landing gear was protruding through the upper surface of the wing. The aircraft was immediately shut down and all the occupants disembarked. Inspection of the aircraft found that the rear section of the landing gear trunnion in the left wing had failed. A metallurgical examination of the trunnion determined that the fracture was caused by the growth of a stress corrosion crack, which was followed by the growth of an unstable ductile crack. The aircraft manufacturer issued a service bulletin, several years previously, to cover the possibility of cracking in the trunnion caused by corrosion. The work required by the service bulletin had only been partially completed on this aircraft at the time of the accident.