

**Aviation Safety Investigation Report
199604182**

**Boeing Co
B747**

21 December 1996

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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.

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: 199604182 **Occurrence Type:** Incident
Location: Melbourne, Aerodrome
State: VIC **Inv Category:** 4
Date: Saturday 21 December 1996
Time: 1507 hours **Time Zone** ESuT
Highest Injury Level: None

Aircraft Manufacturer: Boeing Co
Aircraft Model: 747-200
Aircraft Registration: SX-OAE **Serial Number:**
Type of Operation: Air Transport Scheduled
Damage to Aircraft: Minor
Departure Point: Sydney NSW
Departure Time:
Destination: Melbourne Vic

Approved for Release: Tuesday, January 28, 1997

The aircraft landed on runway 34 but according to the tower controller did not appear to decelerate normally. Approaching taxiway F (which is the high speed exit taxiway) smoke was noted coming from the tyres. The aircraft exited the runway via taxiway F at relatively high speed. After entering taxiway F, directional control was lost and the aircraft departed into the grass on the left side of the taxiway. It then returned to the taxiway and was brought to a stop. The crash alarm was activated and fire services attended. ATC directed the crew to shut the engines down while the fire crews checked for damage. The number 5 (body gear) rear tyre tread was torn as a result of the aircraft skidding across a drainage grate adjacent to taxiway F. The aircraft was towed to the terminal where it docked 27 minutes after the incident.

After docking, the captain reported to engineering that the aircraft had experienced skidding after exiting the main runway onto taxiway F and that it did not respond to nosewheel steering. A maintenance crew changed the damaged tyre plus two other tyres (not related to the incident) and checked the steering system. No fault was found and no other technical problems were reported by the captain. After a delay of approximately one hour, the aircraft was declared serviceable and departed.

Recorded radar data was replayed to see if it was possible to establish the speed of the aircraft as it turned off the main runway. Returns from the aircraft transponder ceased at about the point of touchdown. Attempts were also made to get the FDR from the company but without success. The skid marks left by the aircraft on taxiway F were examined. These indicated that the aircraft had departed the runway onto taxiway F at high speed with the aircraft overshooting the taxiway centreline. It had then corrected back towards the taxiway centreline but then overshot to the right side. A further correction back to the left followed with the aircraft again crossing the taxiway centreline and then departing the left side of the taxiway into the grass. All wheels except the right wing gear wheels left the sealed taxiway and entered the grass. The aircraft then corrected back onto the taxiway and came to a stop close to the centreline.

Marks from all wheels were evident from where the aircraft turned off the runway to where it finally came to a stop but the nosewheels left very significant black skid marks indicative of the aircraft going too fast to follow nosewheel steering input. In summary, the skid marks were indicative of an attempt to turn off the runway onto taxiway F at too high a speed. This is consistent with the evidence of the tower controller.

