

**Aviation Safety Investigation Report
199300884**

**British Aerospace Plc
Jetstream**

31 March 1993

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.

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: 199300884 **Occurrence Type:** Incident
Location: Perth
State: WA **Inv Category:** 4
Date: Wednesday 31 March 1993
Time: 0845 hours **Time Zone** WST
Highest Injury Level: None

Aircraft Manufacturer: British Aerospace Plc
Aircraft Model: 3107
Aircraft Registration: VH-JSW **Serial Number:** 620
Type of Operation: Air Transport Domestic Passenger
Damage to Aircraft: Nil
Departure Point: Geraldton WA
Departure Time: 0740 WST
Destination: Perth WA

Approved for Release: Monday, February 28, 1994

The aircraft was conducting an instrument approach to runway 21 when a Boeing 767 was cleared for takeoff from runway 21. The Boeing had just become airborne as the landing aircraft crossed the runway threshold. At a height of about 20 feet the landing aircraft encountered severe turbulence. The most likely source of the turbulence was the jet efflux of the departing Boeing 767 (Thrust Stream Turbulence), despite the distance between both aircraft exceeding the separation standards for an aircraft landing behind a departing aircraft.

The turbulence was reported as being so severe that both pilots in the landing aircraft were occupied in keeping the aircraft upright.

Safety Action:

Following this occurrence the Bureau reviewed similar local and overseas reports. As a result of the review the Bureau recommended to the Civil Aviation Authority that they:

1. review the Aeronautical Information Publication (AIP) with a view to defining a wake turbulence separation standard for medium category aircraft following medium category aircraft on approach.
2. review the AIP and the Manual of Air Traffic Services with a view to clearly defining separation standards with respect to "Thrust Stream Turbulence".
3. assess the need for special or re-classification of Boeing 757 aircraft for the purpose of wake turbulence separation standards.