



Australian Government

Australian Transport Safety Bureau

ATSB TRANSPORT SAFETY INVESTIGATION REPORT

Aviation Occurrence Report – 200607627

Final

Turbulence event – Adelaide Airport SA

15 Dec 2006

Boeing Co 737-476, VH-TJH



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Published by: Australian Transport Safety Bureau
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ISBN and formal report title: see 'Document retrieval information' on page iii.

DOCUMENT RETRIEVAL INFORMATION

Report No.	Publication date	No. of pages	ISBN
200607627	26 June 2007	5	978-1-921164-95-8

Publication title

Turbulence event, Adelaide Airport SA, 15 Dec 2006, Boeing Co 737-476, VH-TJH

Prepared by

Australian Transport Safety Bureau
PO Box 967, Civic Square ACT 2608 Australia
www.atsb.gov.au

Reference No.

Jun2007/DOTARS 50286

Abstract

At approximately 1416 Central Daylight-saving Time on 15 Dec 2006, the flight crew commenced a take-off roll in a Boeing Company 737-400 aircraft, registered VH-TJH, on a scheduled passenger service from Adelaide, SA to Melbourne, Vic.

At a speed of approximately 50 kts, the crew reported an abrupt, uncommanded left yaw. Corrective action was applied and the takeoff was continued without further incident. The remaining flight was uneventful.

The flight crew subsequently reported that they did not notice any rudder pedal movement coincident with the uncommanded yaw and recalled that there was a gusting crosswind from the left during the takeoff.

Data from the aircraft's Flight Data Recorder was recovered and downloaded by the Australian Transport Safety Bureau (ATSB) for review. That review indicated that the input to the aircraft rudder was not uncommanded and that the rudder pedals moved proportionally to the rudder surface deflection at all times. An examination of the aircraft by the aircraft operators' maintenance engineers did not identify any reason for the uncommanded yaw and the aircraft was released back to service. Additionally, there was no other aircraft traffic in the vicinity that may have generated wake turbulence in the immediate timeframe prior to the takeoff.

While the nature of the uncommanded yaw could not be positively identified, it is likely that the event was related to an atmospheric disturbance or turbulence during the takeoff.

The ATSB continues to monitor such reported uncommanded yaw events and has reported similar events in the past (see occurrence reports 200700035, 200500994 and 199703237 available on the ATSB website: www.atsb.gov.au).

THE AUSTRALIAN TRANSPORT SAFETY BUREAU

The Australian Transport Safety Bureau (ATSB) is an operationally independent multi-modal Bureau within the Australian Government Department of Transport and Regional Services. ATSB investigations are independent of regulatory, operator or other external bodies.

The ATSB is responsible for investigating accidents and other transport safety matters involving civil aviation, marine and rail operations in Australia that fall within Commonwealth jurisdiction, as well as participating in overseas investigations involving Australian registered aircraft and ships. A primary concern is the safety of commercial transport, with particular regard to fare-paying passenger operations.

The ATSB performs its functions in accordance with the provisions of the Transport Safety Investigation Act 2003 and Regulations and, where applicable, relevant international agreements.

Purpose of safety investigations

The object of a safety investigation is to enhance safety. To reduce safety-related risk, ATSB investigations determine and communicate the safety factors related to the transport safety matter being investigated.

It is not the object of an investigation to determine blame or liability. However, an investigation report must include factual material of sufficient weight to support the analysis and findings. At all times the ATSB endeavours to balance the use of material that could imply adverse comment with the need to properly explain what happened, and why, in a fair and unbiased manner.

Developing safety action

Central to the ATSB's investigation of transport safety matters is the early identification of safety issues in the transport environment. The ATSB prefers to encourage the relevant organisation(s) to proactively initiate safety action rather than release formal recommendations. However, depending on the level of risk associated with a safety issue and the extent of corrective action undertaken by the relevant organisation, a recommendation may be issued either during or at the end of an investigation.

The ATSB has decided that when safety recommendations are issued, they will focus on clearly describing the safety issue of concern, rather than providing instructions or opinions on the method of corrective action. As with equivalent overseas organisations, the ATSB has no power to implement its recommendations. It is a matter for the body to which an ATSB recommendation is directed (for example the relevant regulator in consultation with industry) to assess the costs and benefits of any particular means of addressing a safety issue.

About ATSB investigation reports: How investigation reports are organised and definitions of terms used in ATSB reports, such as safety factor, contributing safety factor and safety issue, are provided on the ATSB web site www.atsb.gov.au.

FACTUAL INFORMATION

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