

**Aviation Safety Investigation Report
199501763**

**Boeing Co
B737**

13 June 1995

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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: 199501763	Occurrence Type: Incident
Location: 148km W Melbourne, Aerodrome	
State: VIC	Inv Category: 4
Date: Tuesday 13 June 1995	
Time: 1441 hours	Time Zone: EST
Highest Injury Level: None	

Aircraft Manufacturer: Boeing Co	
Aircraft Model: 737-376	
Aircraft Registration: VH-TAF	Serial Number: 23477
Type of Operation: Air Transport Domestic High Capacity Passenger	
Damage to Aircraft: Nil	
Departure Point: Melbourne VIC	
Departure Time: 1402 EST	
Destination: Perth WA	

Approved for Release: Wednesday, August 30, 1995

During climb the Boeing B737 crew noticed an uncommanded stabiliser movement. The stabiliser would continue to run on after a command had ceased. The aircraft returned to Melbourne where a normal landing was carried out.

Maintenance investigation determined that the fault was in the stabiliser clutch. The clutch was found to be sticking confirming the crew's observations.

Clutch sticking had previously been recognised by the manufacturer as a problem in B737-400 and 500 aircraft. The manufacturer devised a modification to prevent clutch sticking and an instruction to modify all actuators was notified to the industry via Alert Service Bulletin 737-27A1191 Rev 1 dated 3 November 1994.

On 10 February 1995, the operator acted on the manufacturer's advice, raising an internal engineering instruction EI-737-27-26 to expedite incorporation of the modification into its fleet. The actuator fitted to the incident aircraft was not one of those that had been modified.

The Civil Aviation Authority (now CASA) raised Airworthiness Directive AD/B737/88 on 12 June 1995. The AD was published in CAO Part 105 Amendment 8/95 (August 1995). The AD referenced the manufacturers Alert Service Bulletin and required that all affected actuators fitted to Australian registered aircraft be modified prior to 12 June 1996.

The operator has since amended the EI to conform with the requirements of the AD.

Significant factors.

The following factors were considered relevant to the development of the incident:

1. The stabiliser actuator clutch contained a known fault that allowed the clutch to remain engaged.
2. The clutch had not been modified to eradicate the fault.
3. The clutch stayed engaged after a command was removed.

Safety actions.

The following safety actions were taken:

1. The manufacturer raised an Alert Service Bulletin to notify the need to modify the actuators.
2. The operator raised an Engineering Instruction to expedite the incorporation of the modification into its fleet.
3. CASA raised an AD to require all Australian registered B737-400 and 500 aircraft to be modified before 26 June 1996.

