

**Aviation Safety Investigation Report
199300485**

**Boeing Co
B727**

25 February 1993

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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.

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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: 199300485 **Occurrence Type:** Incident
Location: 5.5km SW Adelaide
State: SA **Inv Category:** 4
Date: Thursday 25 February 1993
Time: 1331 hours **Time Zone** CSuT
Highest Injury Level: None

Aircraft Boeing Co
Manufacturer:
Aircraft Model: 727-277
Aircraft Registration: VH-ANF **Serial** 22644
Number:
Type of Operation: Air Transport Domestic High Capacity Passenger
Scheduled
Damage to Aircraft: Nil
Departure Point: Adelaide SA
Departure Time:
Destination: Melbourne VIC

Approved for Release: Wednesday, March 9, 1994

The aircraft had just taken off when the fire warning for the centre (No. 2) engine activated. The crew carried out the engine fire drill, shut down the engine and commenced a right hand circuit for a landing back on runway 23.

A distress phase was declared by the tower and emergency services alerted. On downwind, the crew advised that a fire was no longer evident. The aircraft landed without further incident and the passengers were evacuated through the front doors.

Subsequent investigation revealed that a weld in the bleed air "Y" duct for the de-icing system of the engine intake had suffered a fatigue failure. This allowed hot bleed air into the engine compartment which activated the fire warning system. This type of failure has occurred before and there are Service Bulletins addressing the problem.