**Aviation Safety Investigation Report 199402115** 

British Aerospace Plc BAe 146-300

31 July 1994

## Aviation Safety Investigation Report 199402115

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: 199402115 Occurrence Type: Incident

**Location:** Melbourne

State: VIC Inv Category: 4

**Date:** Sunday 31 July 1994

**Time:** 0600 hours **Time Zone** EST

Highest Injury Level: None

**Aircraft** British Aerospace Plc

**Manufacturer:** 

Aircraft Model: BAe 146-300

Aircraft Registration: VH-EWR Serial E3195

Number:

Type of Operation: Air Transport Domestic High Capacity Passenger

Scheduled

**Damage to Aircraft:** Nil

**Departure Point:** Melbourne VIC

**Departure Time:** 

**Destination:** Sydney NSW

**Approved for Release:** Tuesday, February 14, 1995

When the aircraft encountered icing conditions at 3000 feet on climb the following annunciator lights illuminated

- #2 INTAKE LOW PRESSURE
- #2 AIR FAULT
- #4 AIR FAULT
- #2 AIR VALVE
- #4 AIR VALVE

The aircraft returned to Melbourne for a normal landing. Maintenance replaced the #2 engine intake low pressure switch and carried out satisfactory ground runs. During later testing the intake low pressure switch was found to be servicable.

Further checks were carried out on the performance of the number 2 and 4 engines during the overnight service but the fault was unable to be reproduced. The flight data recorder was not examined to ascertain the flight and engine parameters at the time of the incident.

Maintenance noted that low duct temperatures will give an AIR LOW TEMP warning which will cause the air AIR FAULT and AIR VALVE lights to come on. Maintenance advised that it was necessary to maintain 90% N2 to obtain satisfactory airframe anti-ice performance thereby maintaining adequate intake duct temperatures.

Maintenance asked that if the fault reappeared the pilots should supply the N2 figures. The fault has not reappeared.

**Significant Factors** 

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

- 1. The aircraft was flown in icing conditions with thrust settings below those required to maintain adequate anti-ice performance.
- 2. The reason why this occurred was not established.