Aviation Safety Investigation Report 199805069

British Aerospace Plc BAe 146-200A

16 November 1998

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Occurrence Number: 199805069 Occurrence Type: Incident

Location: 2km SW Adelaide, Aerodrome

State: **Inv Category:** SA

Date: Monday 16 November 1998

Time Zone **CSuT** Time: 0842 hours

Highest Injury Level: None

Aircraft British Aerospace Plc

Manufacturer:

Aircraft Model: BAe 146-200A

Aircraft Registration: VH-YAD Serial E2097

Number:

Air Transport Domestic High Capacity Passenger Type of Operation:

Scheduled

Damage to Aircraft: Nil

Departure Point: Adelaide SA 0842 CSuT **Departure Time:**

Destination: Launceston Tas.

Approved for Release: Friday, December 4, 1998

The aircraft was on climb passing through 1200 ft, when the crew observed a fire warning on the right outboard (No. 4) engine. Following completion of the checklist items, the engine was shut down. The aircraft returned to Adelaide and conducted an overweight landing.

Engineering inspection of the No 4 engine, found that an "O" ring in the combustion chamber fuel manifold at the No 7 fuel nozzle, had split internally. The resultant small fuel leak and fire had triggered the fire warning. The detector wire is approximately 3 inches downstream of the failed ring.

As the engine was approaching a 5,000 cycle heavy inspection, an engine change was carried out and the aircraft returned to service. The fuel nozzle "O" ring has a finite life of 5,000 cycles. The failed ring had completed 4673 cycles and is the subject of a Defect Report submission to CASA.