

**Aviation Safety Investigation Report
199702289**

**Saab Aircraft AB
340**

13 June 1997

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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.

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: 199702289 **Occurrence Type:** Incident
Location: Sydney, Aerodrome
State: NSW **Inv Category:** 4
Date: Friday 13 June 1997
Time: 1704 hours **Time Zone:** EST
Highest Injury Level: None

Aircraft Manufacturer: Saab Aircraft AB
Aircraft Model: SF-340B
Aircraft Registration: VH-OLN **Serial Number:** 207
Type of Operation: Air Transport Domestic Low Capacity Passenger
Damage to Aircraft: Nil
Departure Point: Dubbo, NSW
Departure Time: 1600 EST
Destination: Sydney, NSW

Crew Details:

Role	Class of Licence	Hours on	
		Type	Hours Total
Pilot-In-Command	ATPL	766.0	5823
Co-Pilot/1st Officer	ATPL	1870.0	4240

Approved for Release: Wednesday, August 20, 1997

After departing Dubbo for Sydney, whilst climbing through 7,000 ft, the right engine fire warning illuminated momentarily with associated aural warnings, but ceased before any crew action could be taken. As the warning was assessed to be erroneous, the captain elected to continue to Sydney, where the aircraft landed without further incident.

Whilst subsequently holding on taxiway 'Golf', enroute to the eastern apron, the right engine fire warning again illuminated and remained on. The engine was shut down as a precaution and the engine fire phase one drills carried out. As the fire warning ceased, the fire detector fail caution light illuminated. The captain ordered a full shutdown, and aircraft evacuation. There were no injuries and an inspection of the aircraft revealed no evidence of fire.

An engineering investigation revealed that the engine fire detector loop connections were contaminated with oil. The connectors were cleaned, and the fire detector unit changed. The system then tested normally and the aircraft was released for service. However, during subsequent operations further erroneous fire detector failure and fire warnings occurred. Further investigation, including wiring insulation checks, found a chafed wire to the control unit, in the cabin above a passenger overhead locker. Insufficient security of the wire had allowed it to sag and rub against the locker hardware. The operator reported that a fleet inspection indicated this was an isolated problem and no further action was required.

