Aviation Safety Investigation Report 199501834

Saab Aircraft AB
SF-340A

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.

Aviation Safety Investigation Report

199501834

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: 199501834 **Occurrence Type:** Incident
Location: Wynyard, Aerodrome
State: TAS **Inv Category:** 4
Date: Tuesday 13 June 1995
Time: 0650 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: Saab Aircraft AB
Aircraft Model: SF-340A
Aircraft Registration: VH-EKD **Serial Number:** 155
Type of Operation: Air Transport Domestic Low Capacity Passenger
Damage to Aircraft: Nil
Departure Point: Wynyard TAS
Departure Time: 0645 EST
Destination: Melbourne VIC

Approved for Release: Tuesday, October 29, 1996

Soon after takeoff the right engine suffered an underspeed condition and was shut down. The aircraft was returned to Wynyard for a single engine landing.

Maintenance investigation disclosed that the overspeed governor had failed. The governor was removed and sent to the manufacturer for assessment and repair. The manufacturer tested the governor, finding it to be noisy in operation. The high speed setting was found to be low, the governor was uncontrollable at the balance point and was unable to give an overspeed flow.

When the unit was stripped small pieces of aluminium were found in the solenoid body, along with other non metallic particles. The manufacturer did not detail the origin of the contaminants.

A series of failures to governors, pitch control units and feathering solenoid valves fitted to this aircraft type has been traced to electrokinetic corrosion and a particular brand of propeller gearbox oil. The operator has changed to a different oil and incorporated a manufacturer's modification designed to gain equal electrostatic potential by improving the bonding between the propeller and gearbox.

The operator advised that these measures appear to have reduced the rate of deterioration of the components.