Aviation Safety Investigation Report 199301368

Aerospatiale AS.355F1

17 May 1993

Aviation Safety Investigation Report 199301368

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.

Aviation Safety Investigation Report

199301368

Occurrence Number: 199301368 Occurrence Type: Incident

Location: 2.5 km N Dandenong

State: VIC **Inv Category:** 4

Monday 17 May 1993 Date:

0830 hours Time Zone **EST** Time:

Highest Injury Level: None

Aircraft Manufacturer: Aerospatiale AS.355F1 Aircraft Model:

Aircraft Registration: VH-HRA **Serial Number:** 5048

Type of Operation: Miscellaneous Media Operations

Damage to Aircraft: Nil

Departure Point: Port Melbourne Helipad Vic.

Departure Time: 0810 EST

Destination: Port Melbourne Helipad Vic.

Crew Details:

Hours on

Role	Class of Licence	Type Hours Total	
Pilot-In-Command	Commercial	2700.0	4800

Approved for Release: Tuesday, May 18, 1993

While operating in a high out of ground effect hover, the pilot heard a change in the engine noise. He noted that the engine torque needles had split by about 60% with the number two engine torque needle reading high. He also noted that the main rotor revolutions per minute (RPM) had increased to maximum (redline). He assessed the problem as a power turbine governor high-side failure and controlled engine parameters by retarding the power lever for number two engine before performing a gentle run on landing in a nearby paddock.

The air pressure line (Pr line) between the power turbine governor and the fuel control unit was found to have broken in the sleeve near the pipe flare where it was attached to the power turbine governor. The broken pipe allowed pressurised air to escape, thereby causing a governor high side failure.

The company chief engineer determined that the stainless steel pipe broke because it was misaligned at the fitting to the fuel control unit. This placed the pipe under stress which eventually caused it to break near the other end fitted to the power turbine governor.