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**Aviation Safety Investigation Report 199000103** 

**Aerospatiale Industries AS355** 

**04 October 1990** 

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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 CEO 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.

This final aircraft accident report has been prepared using information received during the limited investigation carried out by the Bureau of Air Safety Investigation.

Occurrence Number: 199000103 Occurrence Type: Accident

**Location:** 4 km south of Guilderton WA

**Date:** 04 October 1990 **Time:** 1240

**Highest Injury Level:** Nil

**Injuries:** 

	Fatal	Serious	Minor	None
Crew	0	0	3	3
Ground	0	0	0	-
Passenger	0	0	0	2
Total	0	0	0	5

Aerospatiale Industries

Aircraft Details: AS355
Registration: VH-NJL

**Registration:** VH-NJI **Serial Number:** 5039

Operation Type: Aerial Work
Damage Level: Substantial
Departure Point: Guilderton WA

**Departure Time:** 1235

**Destination:** Jandakot WA

**Approved for Release:** 5th April 1991

## **Circumstances:**

The aircraft was approaching 1000 feet, on departure, when it began to vibrate significantly. The pilot declared an emergency and carried out a precautionary landing in open country. An inspection of the aircraft disclosed that two of the three main rotor blades had begun to delaminate along their trailing edges and the foam core of one blade had begun to break up. Subsequent inspections of the blades indicated that all three had suffered a foliage strike on their lower surface. The strikes had caused sufficient damage to the blade material to allow delamination to occur; however, they had not been sufficiently heavy to damage the blades' leading edges or penetrate the skin except where the blade body joins the trailing edge insert. It was evident from the strike marks that the blades had been positioned at a high angle of attack at the time of the strike. Debris found in the skin fracture indicated that the strikes had occurred some time prior to the delamination but not more than two to four flying hours. The light nature of the strikes indicates that the pilot and crew were possibly unaware that a strike had occurred. The high angle of attack on the blades indicates that the strikes occurred either during an approach to land or whilst the aircraft was manoeuvring at low level in the vicinity of tall trees.