1

Aviation Safety Investigation Report 198700098

Aerospatiale SA330J

7 May 1987

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 CEO 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 CEO 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.

Occurrence Number: 198700098 Occurrence Type: Accident

Location: 15 km SE of North Rankin `A' Rig WA

Date: 7 May 1987 **Time:** 1435

Highest Injury Level: Nil

Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	2	2
Ground	0	0	0	-
Passenger	0	0	0	15
Total	0	0	0	17

Aircraft Details: Aerospatiale SA330J

Registration: VH-WOF

Serial Number:

Operation Type: Charter (Passenger)

Damage Level: Substantial

Departure Point: North Rankin `A' Rig WA

Departure Time: 1435

Destination: Karratha WA

Approved for Release: May 6th 1988

Circumstances:

The pilot reported that when the aircraft was in the cruise at 3500 feet he heard a noise followed by severe vertical and less severe lateral vibration. The aircraft was descended and checks carried out in an attempt to ascertain the cause of the vibration. The cause of the vibration was not determined and the pilot decided to hover taxi the aircraft back to the platform. The aircraft was subsequently landed on a barge without further incident. An inspection of the aircraft found that one of the two lugs on a main rotor blade flapping hinge had failed. The lug fractured as a result of fatigue which originated adjacent to an area of fretting where the blade retaining pin passes through the lug. These lugs had been known to suffer from a defect discovered in service, and the manufacturer introduced a requirement to fit protective washers to the spindle during overhaul in order to prevent the initiating of cracking. The head from this aircraft had been overhauled by the manufacturer some months before the accident and the protective washers were not fitted. The operator had not carried out a recent Maintenance Manual amendment to inspect the lugs of spindles without protective washers. This inspection was not mandatory in Australia at the time of the accident.