

**Aviation Safety Investigation Report
199000583**

Robinson R22-Beta

24 April 1990

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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 accident was not subject to an on scene investigation.

Occurrence Number: 199000583 **Occurrence Type:** Accident
Location: Birrimba Station (80 km S Katherine) NT
Date: 24 April 1990 **Time:** 1105
Highest Injury Level: Nil
Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	0
Total	0	0	0	1

Aircraft Details: Robinson R22-Beta
Registration: VH-IBE
Serial Number: 1033
Operation Type: Aerial Work
Damage Level: Substantial
Departure Point: Birrimba Station NT
Departure Time: 0745
Destination: Birrimba Station NT

Approved for Release: 18th July 1990

Circumstances:

The helicopter was being used to muster cattle from a paddock to a lane. One animal had stopped and the pilot manoeuvred the helicopter towards this animal. This required a down-wind hover in gusty wind conditions and a high air temperature. The paddock was open and the pilot did not consider it was a difficult operation. As the helicopter approached the animal, the pilot realised he had applied full anti-torque pedal and was over-pitching the main rotor. He lowered the collective pitch control but the tail hit a dead tree, the tail rotor blades separated and then the main rotor blades struck the tree. The helicopter landed heavily, bending the skids. The pilot's acknowledged flying rate was high prior to the accident. This flying was mainly on cattle mustering operations in hot, dusty conditions. Such operational conditions, combined with the flying rate and the concentration and skill required, may have resulted in skill fatigue, which is characterised by insidious lapses in performance and judgement. At the same time, the pilot, considering the final muster to be relatively easy, might have become complacent and failed to give full concentration to the job.

Significant Factors:

The following factors were considered relevant to the development to the accident

1. Possible pilot skill fatigue due to a combination of hours flown and difficult operational conditions.
2. Possible complacency due to a perceived easy final muster.
3. The pilot overpitched the main rotor while operating down-wind in hot and gusty conditions.