

**Aviation Safety Investigation Report
199500659**

**Robinson Helicopter Co
R22**

07 March 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.

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: 199500659 **Occurrence Type:** Accident
Location: West Alligator River
State: NT **Inv Category:** 4
Date: Tuesday 07 March 1995
Time: 0935 hours **Time Zone** CST
Highest Injury Level: None

Aircraft Manufacturer: Robinson Helicopter Co
Aircraft Model: R22 BETA
Aircraft Registration: VH-LKS **Serial Number:** 1163
Type of Operation: Charter Passenger
Damage to Aircraft: Substantial
Departure Point: Jabiru NT
Departure Time: 0800 CST
Destination: West Alligator River NT

Crew Details:

Role	Class of Licence	Hours on Type	Hours Total
Pilot-In-Command	Commercial	171.0	768

Approved for Release: Thursday, April 6, 1995

The helicopter was being operated on a wildlife survey flight, and while manoeuvring near a crocodile nest the pilot reported an apparent loss of engine power, with a subsequent decay in main rotor RPM. He attempted to regain rotor RPM by opening the throttle fully, applying right anti-torque pedal, increasing forward speed and reducing collective pitch as much as possible but was unable to arrest the descent. When ground impact became inevitable he levelled the helicopter and applied up collective to cushion the impact, but the resulting heavy landing caused the landing gear skids to collapse and the main rotor blades to strike the ground. The engine was still running and stopped by the pilot.

A brief inspection of the helicopter was made at the accident site, but with some difficulty due to crocodiles in the area. A more detailed inspection was carried out after it was recovered to Darwin. No evidence was found to suggest that it was other than serviceable prior to impact.

The pilot stated that he had departed from Jabiru for the 58km flight with 32 litres of fuel on board the helicopter, and was to refuel at a nearby airstrip for the return flight. Inspection revealed that the amount of fuel remaining in the tank at the time of the accident was 65-70 litres, and the helicopter's all up weight was estimated as being just below the allowable maximum.

The pilot later revised his statement to agree that there would have been about 65 litres of fuel on board at the time of the accident, and suggested that he may have over-pitched the rotor system when distracted by outside events as he attempted to find a place to land near the crocodile nest.

