Aviation Safety Investigation Report 199403055

Kawasaki Heavy Industries Kawasaki KH4

18 October 1994

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Occurrence Number: 199403055 **Occurrence Type:** Accident
Location: 4km W Wildman River
State: NT **Inv Category:** 4
Date: Tuesday 18 October 1994
Time: 1815 hours **Time Zone** CST
Highest Injury Level: Serious
Injuries:

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

Aircraft Manufacturer: Kawasaki Heavy Industries
Aircraft Model: 47G3B-KH4
Aircraft Registration: VH-JKO **Serial Number:** 2018
Type of Operation: Miscellaneous Ferry
Damage to Aircraft: Destroyed
Departure Point: Wildman River NT
Departure Time: 1815 CST
Destination: Humpty Doo NT

Crew Details:

Role	Class of Licence	Hours on Type	Hours Total
Pilot-In-Command	Commercial	1000.0	2000

Approved for Release: Thursday, February 8, 1996

The helicopter on a ferry flight late in the afternoon failed to arrive at its destination. A search found the injured pilot and damaged helicopter the next morning only 4km from the departure point. The pilot had activated the ELT but it failed to transmit.

The pilot stated that a vibration had developed shortly after departure and he slowed the helicopter to nearly a hover at about 150 ft above ground level to determine its origin. He planned to land once clear of trees but as he manipulated the anti-torque pedals the helicopter went out of control and crashed heavily on its right side. Due to head injuries suffered during the accident the pilot had difficulty in remembering any details of the accident subsequent to slowing down.

Inspection revealed that marks on a tail rotor blade indicated that it had impacted something while rotating. The tail rotor drive shaft pin, connecting it to the universal joint, had sheared allowing the shaft to spin in the universal joint.

It was not possible to determine whether the connection between the universal joint and the drive shaft failed because of the tail rotor strike, or whether the tail rotor blade was damaged after the connection had failed.

Engineering evidence tends to indicate that something was struck by the tail rotor blades while they were under power. The item may have been similar to an item of clothing or cloth large enough to fail the tail rotor drive path by overload but not hard enough to dent the tail rotor blades. Nothing that fits this discription was found in the immediate vicinity of the crash site.