

**Aviation Safety Investigation Report
199700024**

**Hughes Helicopters
Hughes 300**

02 January 1997

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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.

Occurrence Number: 199700024

Occurrence Type: Accident

Location: Fitzroy Crossing Lodge, 3km E Fitzroy Crossing, Aerodrome

State: WA

Inv Category: 4

Date: Thursday 02 January 1997

Time: 1530 hours

Time Zone: WST

Highest Injury Level: Serious

Injuries:

| | Fatal | Serious | Minor | None | Total |
|--------------|----------|----------|----------|----------|----------|
| Crew | 0 | 1 | 1 | 1 | 3 |
| Ground | 0 | 0 | 0 | 0 | 0 |
| Passenger | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 1 | 1 | 1 | 3 |

Aircraft Manufacturer: Hughes Helicopters

Aircraft Model: 269C

Aircraft Registration: VH-UFX **Serial Number:** 470593

Type of Operation: Charter Passenger

Damage to Aircraft: Substantial

Departure Point: Fitzroy Crossing WA

Departure Time: 1530 WST

Destination: Fitzroy Crossing WA

Crew Details:

| Role | Class of Licence | Hours on | |
|------------------|------------------|----------|-------------|
| | | Type | Hours Total |
| Pilot-In-Command | Commercial | 3000.0 | 3200 |

Approved for Release: Wednesday, January 22, 1997



The pilot had planned to conduct a series of tourist flights from the helipad at the rear of the Lodge. A 20 m diameter pad had recently been cleared for the operation. The pad was covered with short grass however, it was surrounded by grass up to 0.5 m high. A shrub-like weed was also woven into the tall grass. Only one passenger was carried on the first of the tourist flights and the helicopter performed as expected. On the second tourist flight, this time with two passengers on board, the pilot flew the helicopter to a 1 m hover and then departed towards the east. As it moved through translational-lift the helicopter descended and the right skid entered the 0.5 m-high grass around the helipad. The grass retarded the helicopter and the leading edge of the skid made contact with the ground. The helicopter started to roll to the right. The pilot attempted to stop the roll by reducing power. When this was unsuccessful he increased power to the maximum and attempted to fly out of the roll. This was also unsuccessful and the helicopter ended up rolling onto its right side.

The helicopter was loaded to just under its maximum weight. The pilot misjudged the amount of excess power that would be available under the prevailing conditions and he was unable to keep the helicopter clear of the grass during the departure. The scrub-like weed provided sufficient retardation for the right skid to dig into the ground starting a roll to the right. The pilot's description indicates the helicopter had probably entered a condition known as dynamic rollover (Aviation Safety Digest No. 95, 1975, pg 25) before he started recovery action. As a result his actions did not work.

