

No: 8/91

Ref: EW/G91/05/11

Category: 2c

**Aircraft Type and Registration:** Robinson R22 Beta, G-OVNR

**No & Type of Engines:** 1 Lycoming O-320-B2C piston engine

**Year of Manufacture:** 1990

**Date & Time (UTC):** 26 May 1991 at 1530 hrs

**Location:** Harrietsham, Kent

**Type of Flight:** Private

**Persons on Board:** Crew - 1                      Passengers - 1

**Injuries:** Crew - Minor                      Passengers - Minor

**Nature of Damage:** Substantial to landing gear cabin structure and tail boom

**Commander's Licence:** Private Pilot's Licences (A and H)  
with IMC and Night ratings

**Commander's Age:** 45 years

**Commander's Flying Experience:** 87 hours rotary wing (all on type)  
181 hours fixed wing

**Information Source:** Aircraft Accident Report Form submitted by the pilot and  
further investigation by the AAIB

The helicopter was fitted with a rotor speed governor which, when engaged, controlled the rotor speed at 102% ± 2%. The purpose of the flight was to view a house belonging to the passenger and following an uneventful transit, one circuit of the house was completed at about 900 feet agl. When turning into wind (060°/10 kts) for a further orbit at an indicated airspeed of 5-10 kts, the aircraft suddenly yawed to the right. The pilot applied full left pedal but the helicopter continued to rotate rapidly to the right and started to descend. The pilot applied forward cyclic stick in an attempt to gain airspeed but the aircraft continued its rapid rotation. At a height estimated by the pilot as 50 to 75 feet agl the rotation started to slow down. The pilot flared the aircraft and raised the collective lever before the aircraft struck the ground in a level attitude with considerable vertical velocity and no forward speed. The rotor speed governor had maintained the rotor speed at 102% throughout the incident. The aircraft remained upright after the impact and the engine continued to run. Despite minor injury, the pilot was able to shut down the engine after which both he and his passenger left the aircraft without difficulty.

Inspection of the aircraft by an approved maintenance organisation after the accident indicated that there had been no pre-impact failure that could have caused or contributed to the accident. Engineering evidence also confirmed the pilot's statement that the governor had maintained rotor speed up to the point of the impact.

1 Lycoming O-320-B2C piston engine	No & Type of engine:
1990	Year of Manufacture:
26 May 1991 at 1530 hrs	Date & Time (UTC):
Hartsham, Kent	Location:
Private	Type of flight:
Passengers - 1	Persons on Board:
Crew - 1	Injuries:
Passengers - Minor	Nature of Damage:
Substantial to landing gear cabin structure and tail boom	Commander's Licence:
Private Pilot's Licences (A and H) with IMC and Night ratings	Commander's Age:
45 years	Commander's Flying Experience:
87 hours rotary wing (all on type) 181 hours fixed wing	Information Source:
Aircraft Accident Report Form submitted by the pilot and further investigation by the AAIB	

The helicopter was fitted with a rotor speed governor which, when engaged, controlled the rotor speed at 102% ± 2%. The purpose of the flight was to view a house belonging to the passenger and following an uneventful transit one circuit of the house was completed at about 900 feet a.g.l. When turning into wind (060°/10 kts) for a further orbit at an indicated airspeed of 2-10 kts, the aircraft suddenly yawed to the right. The pilot applied full left pedal but the helicopter continued to rotate rapidly to the right and started to descend. The pilot applied forward cyclic stick in an attempt to gain altitude but the aircraft continued its rapid rotation. At a height estimated by the pilot as 20 to 25 feet as the rotor started to slow down. The pilot flared the aircraft and raised the collective lever before the aircraft struck the ground in a level attitude with considerable vertical velocity and no forward speed. The rotor speed governor had maintained the rotor speed at 102% throughout the incident. The aircraft remained upright after the impact and the engine continued to run. Despite minor injury, the pilot was able to shut down the engine after which both he and his passenger left the aircraft without difficulty.