

Robinson R44, G-POLT

AAIB Bulletin No:
9/2001

Ref: EW/G2001/06/09

Category: 1.1

Aircraft Type and Registration: Robinson R44, G-POLT

No & Type of Engines: 1 Lycoming O-540-F1B5 piston engine

Year of Manufacture: 1997

Date & Time (UTC): 9 June 2001 at 1630 hrs

Location: Heolgerrig, South Wales

Type of Flight: Private

Persons on Board: Crew - 2 - Passengers - 2

Injuries: Crew - None - Passengers - None

Nature of Damage: Substantial to left side of fuselage and rotor assembly

Commander's Licence: Private Pilots Licence (Helicopters) with Night Rating and Instructor Rating

Commander's Age: 35 years

Commander's Flying Experience: 639 hours (of which 38 were on type)

Last 90 days - 36 hours

Last 28 days - 10 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The instructor, occupying the left front seat, was converting a qualified R22 pilot onto the R44. In the rear seats were another R22 qualified pilot and a student helicopter pilot. They were returning to Cardiff airport after approximately 30 minutes of type conversion training. The weather at the time was fine with good visibility, few clouds at 3,500 feet and a surface wind of 280°/12 kt.

As the route took the helicopter near the instructor's home he suggested that he demonstrate an approach and landing to a 'private site' and set the helicopter up for an approach to an area within the grounds of his property. He reduced the forward speed and pointed out the various ground features and local dangers associated with the site. Descending through 50 feet, and with near zero airspeed, the pilot reported that a 'sudden and very strong gust of wind' yawed the helicopter to the right. As corrective left pedal was applied the helicopter's rate of descent increased. Increased power failed to arrest the sink rate and so the instructor turned the helicopter to the left and attempted to increase airspeed in order to gain the benefit of translational lift. Being now, quite close to the ground he used the remainder of the power available to cushion the landing onto sloping ground in an adjacent field. The instructor reported that at this point the helicopter rolled over, coming to rest on its left side.

The uninjured occupants vacated the helicopter via the right door. The instructor assessed the cause of the accident as the encounter with unexpected gusting wind conditions brought about by the mountainous nature of the local area.