

Robinson R22 Alpha, G-BLTF

AAIB Bulletin No: 9/2003	Ref: EW/G2003/06/18	Category: 2.3
Aircraft Type and Registration:	Robinson R22 Alpha, G-BLTF	
No & Type of Engines:	1 Lycoming O-320-B2C piston engine	
Year of Manufacture:	1984	
Date & Time (UTC):	23 June 2003 at 1422 hrs	
Location:	Blackpool Airport, Blackpool, Lancashire	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Substantial	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	44 years	
Commander's Flying Experience:	788 hours (of which 720 were on type)	
	Last 90 days - 93 hours	
	Last 28 days - 36 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

After the student pilot had practised various manoeuvres in the hover the instructor proceeded to demonstrate the recovery actions required should the helicopter drift downwind during a spot turn manoeuvre. The reported surface wind was 270°/18 kt.

The helicopter was positioned into wind at an estimated skid height of 20 feet to allow for any sink during the recovery. A spot turn to the left was commenced and the helicopter was deliberately allowed to drift downwind through the first 180° of the turn. The turn was then continued and forward cyclic control was applied to arrest the rearward movement. When the helicopter was facing back into wind, still at a skid height of 20 feet, it was however, still travelling rearwards at a ground speed of 10 kt. The rotor disc flapped forward, as is normal in this situation, and the helicopter pitched nose down. As a result the helicopter descended and the front of the skids struck the ground. It bounced airborne to a skid height of 5 feet, rotated to the right through 270° and hit the ground coming to rest, in an erect attitude with one skid detached and with extensive damage to the airframe, approximately 15 metres downwind from the initial point.

The engine and rotors were shut down and the crew vacated the helicopter via the normal doors.

The instructor assessed the cause of the accident as a greater rearward ground speed than anticipated causing the 'flap forward' and subsequent pitch change.