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ACCIDENT

Aircraft Type and Registration:	Robinson R22 Beta, G-EROM	
No & Type of Engines:	1 Lycoming O-360-J2A piston engine	
Year of Manufacture:	2002 (Serial no: 3383)	
Date & Time (UTC):	11 April 2013 at 1018 hrs	
Location:	Redhill Aerodrome, Surrey	
Type of Flight:	Training	
Persons on Board:	Crew - 1 Passengers - None	
Injuries:	Crew - 1 (Minor) Passengers - N/A	
Nature of Damage:	Extensive	
Commander's Licence:	Student	
Commander's Age:	36 years	
Commander's Flying Experience:	24 hours (of which all were on type) Last 90 days - 18 hours Last 28 days - 9 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The student pilot was carrying out his first solo flight. As he lifted off, the helicopter rolled and yawed to the right, the main rotor blades struck the ground which caused the helicopter to roll onto its right side. The pilot was uninjured and was able to exit the helicopter unassisted.

History of the flight

The student pilot was briefed to carry out his first solo flight which comprised takeoffs, landings and hover practice in the southern hover square at Redhill. The surface wind was calm and there was no precipitation.

Initially, the exercises were carried out 'dual' with an instructor and were performed satisfactorily. The instructor confirmed the student understood the brief for a solo flight. Standing some 10 metres in front of the helicopter, the instructor gave the student the signal to lift into the hover. The student slowly raised the collective control lever, at the same time monitoring the Manifold Air Pressure (MAP) gauge to achieve 18 inches of boost. He had been told that this was the approximate power indication at which the helicopter would start to lift off. As it appeared to lift off, the helicopter 'lurched' to the right and the student instinctively continued to raise the collective lever. The roll to the right increased and was accompanied by the nose yawing to the right, both of which the student was unable to correct before the main rotor blades struck the ground. The helicopter rolled onto its right

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side, having rotated through approximately 180°. The student isolated the fuel and electrical systems before exiting through the left door.

The student pilot considered that the cause of the accident was that he had not identified the developing dynamic rollover. He had been taught to lower the

collective lever at the onset of this condition but had focussed his attention on the MAP gauge and not monitored the helicopter attitude and therefore did not identify the developing situation.