

# Robinson R22 Beta, G-BSCL

<b>AAIB Bulletin No:</b> 6/2002	<b>Ref:</b> EW/G2002/03/22	<b>Category:</b> 2.3
<b>Aircraft Type and Registration:</b>	Robinson R22 Beta, G-BSCL	
<b>No &amp; Type of Engines:</b>	1 Lycoming O-320-B2C piston engine	
<b>Year of Manufacture:</b>	1989	
<b>Date &amp; Time (UTC):</b>	24 March 2002 at 1020 hrs	
<b>Location:</b>	Wycombe Air Park, Buckinghamshire	
<b>Type of Flight:</b>	Private (Training)	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - Minor	Passengers - N/A
<b>Nature of Damage:</b>	Substantial	
<b>Commander's Licence:</b>	Student Pilot	
<b>Commander's Age:</b>	36 years	
<b>Commander's Flying Experience:</b>	54 hours (all on type)	
	Last 90 days - 4 hours	
	Last 28 days - 1 hour	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and further enquiries by AAIB.	

The student pilot was preparing to take off for an hour's solo flying, having just completed 35 minutes of dual instruction. The instruction had included circuits and approximately 10 takeoffs and landings.

As the pilot raised the collective, the helicopter was observed to become light on its skids, before rolling rapidly about its right skid, which remained in contact with the ground. The helicopter came to rest lying on its right side. The main rotor stopped on impact with the ground and suffered severe damage. The engine was heard to run at high speed before running down.

After impact, the pilot closed the throttle and lowered the collective. He remained strapped in his seat. Staff from the operator, a neighbouring helicopter company, and the airfield Rescue and Fire Fighting Service, attended the scene. The fuel tank had ruptured and the pilot was lying in a pool of fuel. Fortunately, there was no fire, but foam was laid down over the fuel spill and the engine as a

precaution. The helicopter was made safe by those attending the scene, the left door and perspex were cut away and the pilot was assisted from his seat. He was taken to hospital for treatment to minor injuries and later released.

The helicopter had been on a heading of 190°. The surface wind was from 180° at 7 to 10 kt, and visibility was greater than 10 km under scattered cloud at 2,000 feet. Although advised to use more left and forward cyclic when taking off solo, the pilot stated that, initially, he held the cyclic in the neutral position. As he began to raise the collective, he was surprised at the speed with which the helicopter started to lift. When he felt that the helicopter was about one foot in the air, he introduced left cyclic to counter a roll to the right. He believed that it was sufficient, but then the roll rate increased and the helicopter continued over onto its right side.

The pilot concluded that the accident was a result of dynamic rollover.