

## Robinson R22 Beta, G-BYHD

<b>AAIB Bulletin No:</b>	<b>10/2000</b>	<b>Ref:</b>	<b>EW/G2000/08/13</b>	<b>Category:</b>	<b>2.3</b>
<b>Aircraft Type and Registration:</b>	Robinson R22 Beta, G-BYHD				
<b>No &amp; Type of Engines:</b>	1 Lycoming O-320-B2C piston engine				
<b>Year of Manufacture:</b>	1990				
<b>Date &amp; Time (UTC):</b>	12 August 2000 at 1420 hrs				
<b>Location:</b>	3 miles east of Callander, Scotland				
<b>Type of Flight:</b>	Private				
<b>Persons on Board:</b>	Crew - 1 - Passengers - 1				
<b>Injuries:</b>	Crew - None - Passengers - None				
<b>Nature of Damage:</b>	Engine support frame damaged; landing skids splayed and damage to tail boom, vertical stabiliser and tail rotor blades				
<b>Commander's Licence:</b>	Private Pilot's Licence with Instructor Rating				
<b>Commander's Age:</b>	38 years				
<b>Commander's Flying Experience:</b>	590 hours (of which 550 were on type)				
	Last 90 days - 5 hours				
	Last 28 days - 5 hours				
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot				

The pilot had been airborne from a private landing site for approximately 15 minutes. As he made an approach to the landing site, the low rotor RPM warning horn sounded and the pilot saw that the rotor RPM was decreasing. At approximately 500 feet agl, he entered autorotation and selected a field ahead for landing. He flared G-BYHD close to the ground but, with little apparent decrease in forward airspeed tightened his flare. The helicopter landed heavily, with the tail making ground contact, and bounced forward. During the bounce, G-BYHD rotated to the right and the subsequent initial ground contact was on the left skid; the helicopter remained upright.

The pilot stated that the loss of rotor RPM was probably caused by carburettor icing. He assessed the weather in his operating area as follows: calm wind, visibility 20 km, cloud overcast at 1,500 feet agl and air temperature 18°C. He also described the day as "very moist".

The repair agency confirmed that no unserviceabilities were found with the helicopter, which would have caused the loss of rotor RPM; the pilot also confirmed that the engine appeared normal after his landing. He subsequently commented that he could not be certain when he had applied carburettor heat but that he was aware of the need to do so prior to descent.