

# Robinson R22 Alpha, G-VMSL

<b>AAIB Bulletin No:</b> 11/2001	<b>Ref:</b> EW/G2001/06/06	<b>Category:</b> 2.3
<b>Aircraft Type and Registration:</b>	Robinson R22 Alpha, G-VMSL	
<b>No &amp; Type of Engines:</b>	1 Lycoming O-320-B2C piston engine	
<b>Year of Manufacture:</b>	1985	
<b>Date &amp; Time (UTC):</b>	4 June 2001 at 1500 hrs	
<b>Location:</b>	Adjacent to Turweston Airfield, Northants	
<b>Type of Flight:</b>	Training	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Extensive	
<b>Commander's Licence:</b>	Student Pilot	
<b>Commander's Age:</b>	43 years	
<b>Commander's Flying Experience:</b>	56 hours (all on type)	
	Last 90 days - 47 hours	
	Last 28 days - 23 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

The student pilot was operating the second leg of her qualifying cross country navigation exercise, en route from Sywell to Turweston. As the helicopter approached Turweston, the pilot assessed that she was too high to make a direct approach to the helicopter landing area. She elected to commence a left turn in order to reposition the helicopter for an approach. The weather was good, with a surface wind from 300° at 10 kt.

During the course of the orbit, while at about 700 feet agl with cruise power set, the pilot lost sight of the airfield and began to refer to the map in order to confirm her position, which was about 1 nm south of the landing area. The pilot then became aware of the helicopter shuddering and noted that the airspeed had reduced to 20 kts or less and the cyclic control was becoming ineffective. The helicopter had begun to descend rapidly. The pilot elected to lower the collective lever fully and to enter autorotation. The airspeed was regained to about 50 kt and a landing area was targeted. After

flaring, the helicopter touched down with residual forward speed in a rough crop field and rolled over onto its side during the ground slide.

There was no fire and the pilot, who was uninjured, vacated the helicopter through the broken canopy.

The pilot assessed that, as a result of distraction from the primary handling task, the helicopter had entered the early stages of a 'vortex ring' condition as a result of the inadvertent loss of forward speed in the turn while having power applied.