

## Robinson R22 Beta, G-BSXN

<b>AAIB Bulletin No: 5/2004</b>	<b>Ref: EW/G2004/02/05</b>	<b>Category: 2.3</b>
<b>Aircraft Type and Registration:</b>	Robinson R22 Beta, G-BSXN	
<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>	11 February 2004 at 1216 hrs	
<b>Location:</b>	Newcastle Airport, Tyne and Wear	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - 1
<b>Injuries:</b>	Crew - 1 (Minor)	Passengers - 1 (Minor)
<b>Nature of Damage:</b>	Major structural damage	
<b>Commander's Licence:</b>	JAR Private Pilot's Licence (Helicopters)	
<b>Commander's Age:</b>	63 years	
<b>Commander's Flying Experience:</b>	96 hours (all on type)	
	Last 90 days - 9 hours	
	Last 28 days - 3 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

After an uneventful 45 minute flight in the local area, the pilot returned to Newcastle Airport. The weather was good with a light and variable surface wind; Runway 25 was in use. Initially, G-BSXN was held to the north of the runway because of other aircraft movements but was then cleared to cross the runway to 'Hold Echo'. With an aircraft being held at the take-off position, the pilot of G-BSXN flew across the runway at approximately 40 kt. Then, as he did not want to execute an aggressive 'quick stop' he allowed the helicopter to climb as it slowed. At an estimated height of 70 feet, he manoeuvred to face west and began his descent to a low hover. As he did so, he was conscious of the waiting aircraft and erroneously allowed the descent rate to increase. The pilot considered that he then entered a 'Vortex Ring' situation and, due to the low altitude, was unable to recover before the helicopter landed very heavily.