

# Rans S6-ES, G-BYCO

<b>AAIB Bulletin No:</b> 11/2001	<b>Ref:</b> EW/G2001/08/18	<b>Category:</b> 1.3
<b>Aircraft Type and Registration:</b>	Rans S6-ES, G-BYCO	
<b>No &amp; Type of Engines:</b>	1 Rotax 582-48 piston engine	
<b>Year of Manufacture:</b>	1999	
<b>Date &amp; Time (UTC):</b>	23 August 2001 at 1945 hrs	
<b>Location:</b>	Limavady, Northern Ireland	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 2	Passengers - None
<b>Injuries:</b>	Crew - 2 (Serious)	Passengers - N/A
<b>Nature of Damage:</b>	Damaged beyond economic repair	
<b>Commander's Licence:</b>	Private Pilots Licence with Instructors Rating	
<b>Commander's Age:</b>	32 years	
<b>Commander's Flying Experience:</b>	1,407 hours (of which 81 were on type)	
	Last 90 days - 40 hours	
	Last 28 days - 6 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

## Background to the flight

The aircraft had been built over a period of two years and the owner had not flown during that time. Consequently, he undertook a comprehensive retraining programme and had flown 23 hours dual and 8 hours solo. The accident happened during the General Flight Test (GFT) which was to complete the training programme. He had flown a total of 96 hours in aircraft of this class.

## History of flight

The aircraft had been set up for a practice forced landing. The owner reported that, at about 200 feet agl, he decided that he was not in a position to make a successful landing and informed the Instructor who took control. His recall of the event was that the Instructor had continued the approach and carried out an 'S' turn to lose height. The general direction was almost into the wind,

which was light. Whilst turning to the right at about 100 to 150 feet agl, the nose "dropped" and the aircraft descended and struck the ground in a steep nose down attitude.

The Instructor's recall of the event was that he took control at about 230 feet agl, on a southerly heading, flew level, applied cruise power and turned onto an easterly heading to increase the distance from the field to show the owner that it was not ideal for a forced landing. He assessed the surface wind as 240°/10 mph and subsequently started to turn to take up a westerly heading. As the aircraft turned through south, with about 35° of bank, the nose "dropped slightly"; he noted that the speed was 58 to 60 mph; the wings level, power off stall speed is about 35 mph. He applied back pressure and increased the power slightly, however the nose continued to drop and the bank angle increased. He then applied full power and tried to roll the wings level but the aircraft descended rapidly and struck the ground at an angle of about 30° from the vertical, right wing low. He estimated the impact speed to have been about 75 to 80 mph.

The cockpit area was severely disrupted but both occupants were wearing lap and diagonal upper torso restraint and, despite being seriously injured, managed to crawl clear of the wreckage.