

Robinson R22 Beta, G-BSWK

AAIB Bulletin No: 10/97 Ref: EW/G97/06/08 Category: 2.3

Aircraft Type and Registration:	Robinson R22 Beta, G-BSWK
No & Type of Engines:	1 Lycoming O-320-B2C piston engine
Year of Manufacture:	1990
Date & Time (UTC):	13 June 1997 at 1330 hrs
Location:	Bournemouth International Airport, Dorset
Type of Flight:	Private (Training)
Persons on Board:	Crew - 1 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Substantial to right side of fuselage and tail section
Commander's Licence:	Student
Commander's Age:	26 years
Commander's Flying Experience:	22 hours (of which 20 were on type)
Information Source:	Aircraft Accident Report Form submitted by the pilot

The student pilot had completed a satisfactory 40 minute dual instructional check and was considered by his instructor to be ready for his first solo flight. He was briefed on the position of the cyclic control necessary to minimise the effects of the change in C of G without the instructor present. The weather at the time was fine with a light south-westerly breeze and good visibility.

As the helicopter lifted into the hover, the nose pitched up, the tail struck the ground and the aircraft rolled over onto its right side. The student who had been restrained by a lap and diagonal seat belt was pulled uninjured from the wreckage by the instructor who had been standing nearby.

The instructor assessed the cause of the accident as insufficient control being applied to compensate for the change in the C of G. The instructor also recommended that weight should be loaded in the co-pilot baggage compartment to compensate for the absence of the instructor during a student pilot's first solo.

The R22 Pilot's Operating Handbook Limitations Section 2, details the weight limitations. The minimum solo pilot weight is 130 lb (59 kg) with normal fuel carried and 135 lb. (61 kg) with auxiliary fuel carried. The solo pilot involved in this accident weighed 150 lb (68 kg).