

ACCIDENT

Aircraft Type and Registration:	Robinson R22 Beta, G-HRBS	
No & Type of Engines:	1 Lycoming O-360-J2A piston engine	
Year of Manufacture:	2004	
Date & Time (UTC):	28 September 2010 at 1256 hrs	
Location:	Goodwood Aerodrome, West Sussex	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Tail skin creased with associated damage to firewall	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	57 years	
Commander's Flying Experience:	270 hours (of which 52 were on type) Last 90 days - 9 hours Last 28 days - 2 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The pilot judged that he had over-controlled the aircraft when experiencing dynamic rollover during takeoff. The aircraft became airborne and began rotating, before impacting the ground and sustaining serious damage to its tail. The pilot was unaware of the damage and continued the flight, landing without further incident.

History of the flight

The pilot had completed a refresher flight with an instructor and was about to embark on a solo flight to practise circuits. The aircraft was parked on a grass area with the engine running as the instructor got out. The pilot stated that he then completed the before-takeoff checks and started to lift, but that the aircraft began to tilt sharply to the right. He reported that the right skid was

digging into the soft ground and that the situation was exasperated by his being the sole occupant and seated in the right seat. Believing the aircraft was going to roll over, he reduced power and aggressively applied a left cyclic control input. The aircraft became airborne, lifting to a height of about a foot and began to rotate to the left. The rear of the right skid then dug into the ground, bringing the rotation to an abrupt halt and causing the aircraft to land heavily.

The instructor returned to the aircraft and confirmed with the pilot that he was still happy to undertake a flight on his own. The pilot confirmed that he was, and subsequently successfully practised several takeoffs and landings before flying three circuits of the airfield. He

experienced no handling problems and on completing the flight shut down the aircraft and completed the normal post-flight paperwork before going home.

Subsequently a three inch long crease was found in the right side of the tail section of the aircraft, at its junction with the main fuselage.

Assessment of the cause

The pilot was aware of dynamic rollover and had been “somewhat shaken” by the degree to which the aircraft

had rolled when attempting to takeoff. He judged that he had made an “over-aggressive correction” in the opposite direction as a result, which led temporarily to his losing control of the aircraft. The damage was caused by the torsion loads experienced when the aircraft skid contacted the ground.

The decision to continue with the flight was based on lack of evidence of any damage having been caused and the pilot wishing to regain his confidence in his handling abilities.