

ACCIDENT

Aircraft Type and Registration:	Pierre Robin DR400/180 Regent, G-GLKE	
No & Type of Engines:	1 Lycoming O-360-A3A piston engine	
Year of Manufacture:	1992	
Date & Time (UTC):	9 January 2011 at 1100 hrs	
Location:	Bodmin Airfield, Cornwall	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 2
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Propeller, front oleo, cowling, leading edge of left wing, right wing, spats and both sides of elevator	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	46 years	
Commander's Flying Experience:	379 hours (of which 314 were on type) Last 90 days - 12 hours Last 28 days - 1 hour	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

After takeoff the aircraft failed to accelerate and climb and hit a hedge at the end of the runway on the airfield perimeter before coming to a stop shortly afterwards. The aircraft was damaged but the pilot and passengers were uninjured and vacated the aircraft without difficulty. The conditions at the time of the flight were such that there was serious risk of carburettor icing at any power setting.

History of the flight

During the power checks, the pilot selected carburettor heat ON for several minutes and satisfied himself that there was no carburettor ice present. With the power checks complete, he taxied the aircraft to a point just

off Runway 31 and conducted his pre-takeoff checks. He then lined up on the grass strip about 50 m from its start, the first part having been coned off due to the presence of soft ground. The time from the power checks being completed to being lined up was between one and two minutes.

During the takeoff roll the aircraft appeared to accelerate normally and the pilot noticed that engine rpm was normal. The rotation point was further down the runway but not unexpected since the starting point for the takeoff run was displaced. Although moving faster than the 54 kt rotate speed, the aircraft struggled to get airborne and required steadily more nose-up elevator before leaving the ground with a high nose-up

pitch attitude. However, it failed to accelerate or climb away and instead “wallowed” and a wingtip struck the ground. The pilot had difficulty controlling the aircraft and it hit a hedge at the end of the runway on the airfield perimeter before coming to a stop shortly afterwards.

The aircraft suffered damage to the propeller, both wings, the undercarriage and engine cowls. However, the pilot and passengers, who were each wearing three-point lap and diagonal harnesses, were uninjured and vacated the aircraft without difficulty.

No detailed examination of the engine or engine systems was carried out, but the pilot learned that carburettor icing was experienced by other pilots at the airfield that day. The temperature and dew point were 7°C and 2°C respectively, which placed the risk of carburettor icing as ‘*Serious icing – any power*’ based on the carburettor icing probability chart in the CAA’s Safety Sense Leaflet 14.