

ACCIDENT

Aircraft Type and Registration:	Rotorsport UK Calidus, G-CLDS	
No & Type of Engines:	1 Rotax 912ULS piston engine	
Year of Manufacture:	2008 (Serial no: RSUK/CALS/001)	
Date & Time (UTC):	31 July 2015 at 1339 hrs	
Location:	Hereford Golf Academy, Hereford	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - 1 (Minor)	Passengers - 1 (Minor)
Nature of Damage:	Aircraft destroyed	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	64 years	
Commander's Flying Experience:	284 hours (of which 231 were on type) Last 90 days - 28 hours Last 28 days - 8 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The aircraft rotated to an excessive nose-up attitude during a 'short-field' takeoff. The aircraft became airborne but its airspeed was too low and reducing. The aircraft turned right and its rotor blades struck the ground. The pilot and passenger received minor injuries but the aircraft was destroyed.

History of the flight

The pilot intended to take the passenger for a short flight from a small grass strip, located near to a golf course. This would be only his second flight with a passenger from this strip, so he practised his short-field takeoff technique several times, flying with his passenger at a nearby airfield. The short-field takeoff technique in this aircraft involves pre-rotating the blades to 250 rotor rpm at one end of the takeoff strip, then accelerating down the strip with full power and the control stick fully aft. When the nosewheel leaves the ground, the control stick should be moved forward to hold the aircraft's nose just off the ground until the best angle of climb speed is reached, when the speed-stable attitude is selected and the aircraft climbs away.

The pilot accelerated the rotor rpm at the start of his takeoff run, applied full power and commenced his takeoff roll. As the airspeed reached approximately 40 mph, the nose rose rapidly and the aircraft became airborne. With the attitude remaining excessively nose-high and full power still applied, the airspeed reduced rapidly and the aircraft began descending

and turning to the right. The pilot realised a collision was imminent and shouted a warning to his passenger, before the rotor blades made contact with the ground, the aircraft rolled onto its side and the engine stopped. The passenger was able to vacate the aircraft normally, but the pilot needed assistance from both the passenger and some passing golfers to free his arm from the wreckage of the aircraft. Both the pilot and his passenger received minor injuries; the aircraft suffered substantial damaged, but there was no fire.

The pilot considered that during the takeoff roll, approaching the speed at which the aircraft's nose should have come off the ground, the aircraft probably hit a bump in the grass which caused the nose to pitch up excessively. He did not move the control stick sufficiently far forward to return the aircraft to a normal climbing attitude, and the aircraft became too slow. At this point the pilot could have closed the throttle and aborted the takeoff.