

ACCIDENT

Aircraft Type and Registration:	Rotorsport UK MTOsport, G-CGZM	
No & Type of Engines:	1 Rotax 912 ULS piston engine	
Year of Manufacture:	2011 (Serial no: RSUK/MTOS/042)	
Date & Time (UTC):	13 September 2016 at 1730 hrs	
Location:	Headon Airfield, Nottinghamshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Rotor blades	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	55 years	
Commander's Flying Experience:	335 hours (of which 82 were on type) Last 90 days - 21 hours Last 28 days - 4 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The pilot decided to perform a go-around from a height of 50 ft above the runway with 500 m of runway remaining. He applied nose-up pitch and full engine power, but the aircraft levelled at about 35 ft at an airspeed of 40 mph. With several dwellings ahead of the aircraft's flightpath near the airfield boundary, the pilot decided to land, touching down just beyond the end of the runway. The landing was successful, but the rotor struck an adjacent hedge after the aircraft had come to a stop. The pilot and passenger were uninjured.

History of the flight

The pilot and passenger were returning to land at Headon Airfield following a local flight. The weather was fine, with no low cloud, wind from 050° at 4 kt and a temperature of 25°C. The combined weight of the pilot, passenger and fuel resulted in the aircraft being about 35 kg below its maximum takeoff weight.

During the overhead join, the pilot observed that the airfield windsock indicated that conditions were calm, and he decided to land on Runway 32, the longer of the two grass runways, which has an LDA of 600 m. He stated that, having turned onto final approach at 60 mph, the aircraft was higher and closer to the runway than he had anticipated. He continued the approach and the aircraft crossed the runway threshold, but, having travelled 100 m along the runway, the aircraft was still at a height of 50 ft, at which point the pilot decided to carry out a go-around. He applied nose-up pitch and full engine power, but the aircraft continued

to descend before levelling at about 35 ft at an airspeed of 40 mph. Concerned that the aircraft did not appear to be climbing, and that, directly ahead of the aircraft beyond the airfield boundary, there were several dwellings that the aircraft might not have cleared, the pilot decided to land. He touched down in a flat clear area near the end of the runway; the touchdown was normal, with a ground roll of about 5 m before the aircraft came to a stop. He then shut down the engine but, as the rotor slowed, it drooped and struck the top of an adjacent hedge, resulting in damage. The pilot and passenger were uninjured.

The pilot considered that his decision to go around was late and he had underestimated the effect on the aircraft's performance when near to its maximum weight on a hot day. He further stated that he had not noticed the proximity of the rotors to the hedge as they slowed down.

CAA Handling Sense Leaflet number 4 discusses among other aspects, the effect of atmospheric temperature on gyrocopter performance, and notes that *on a 'warm UK summer day (approximately 20-30°C), performance will be noticeably poorer.'*