

## ACCIDENT

<b>Aircraft Type and Registration:</b>	Rotorsport UK MTOsport, G-CGGL	
<b>No &amp; Type of Engines:</b>	1 Rotax 912 ULS piston engine	
<b>Year of Manufacture:</b>	2009	
<b>Date &amp; Time (UTC):</b>	31 March 2012 at 1125 hrs	
<b>Location:</b>	Kirkbride Airfield, Cumbria	
<b>Type of Flight:</b>	Training	
<b>Persons on Board:</b>	Crew - 1	Passengers - 1
<b>Injuries:</b>	Crew - None	Passengers - None
<b>Nature of Damage:</b>	Damage to airframe, engine, rotors and propeller	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	59 years	
<b>Commander's Flying Experience:</b>	1,900 hours (of which 1,500 were on type) Last 90 days - 60 hours Last 28 days - 26 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

## Synopsis

The gyroplane suffered a partial loss of engine power during takeoff. The instructor landed the aircraft on the remaining runway but was unable to bring it to a stop before it ran off the end.

## History of the flight

The instructor pilot was flying a takeoff as part of an instructional exercise when the accident occurred. The weather was fine, with a surface wind from 050° at about 5-7 kt and an air temperature of 14°C; Runway 05 was in use. The pilot reported that the gyroplane waited on the ground longer than normal after engine start and before commencing takeoff, such that the engine temperature was higher than usual, while still within the normal operating range.

All pre-flight and engine checks had been carried out and the takeoff appeared normal until shortly after the gyroplane had left the ground, when there was a sudden reduction in engine power. The pilot was able to land the gyroplane on the remaining runway but could not bring it to a stop before it ran off the end and into the perimeter fence. Both the pilot and his student were wearing full safety harnesses and protective helmets. Although the pod sustained moderate damage, neither occupant was injured.

When the engine was examined, the spark plugs for cylinder 4 were found to be 'wet' with fuel, indicating that they had not been firing. The engine was subsequently run successfully. During discussion

between the pilot and engineering personnel, the increased engine operating temperature, the relatively warm day and the use of winter grade MOGAS were considered to have been conducive to vapour lock in the fuel lines, although this would not have accounted for the 'wet' spark plugs in cylinder 4.