

ACCIDENT

Aircraft Type and Registration:	Rotorsport UK MT-03, G-CEYX	
No & Type of Engines:	1 Rotax 912ULS piston engine	
Year of Manufacture:	2008	
Date & Time (UTC):	24 September 2010 at 1315 hrs	
Location:	Kirkbride Airfield, Cumbria	
Type of Flight:	Training	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - 1 (Minor)	Passengers - N/A
Nature of Damage:	Damage to rotors, left main landing gear, fuselage pod, propeller and rudder	
Commander's Licence:	Student pilot	
Commander's Age:	51 years	
Commander's Flying Experience:	80 hours (of which 51 were on type) Last 90 days - 34 hours Last 28 days - 6 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

Whilst taking off the student pilot did not use the technique he had been taught, resulting in a loss of control and the gyroplane rolling on to its side. The pilot received minor injuries.

History of the flight

The student pilot was departing on a solo cross-country flight in fine weather. He lined up on Runway 10 and, in accordance with the normal takeoff procedure, selected full forward cyclic before he engaged the pre-rotator.

The student pilot reported that, during a normal takeoff, once the rotor has reached 220 rpm, the pre-rotator should be disengaged, the brakes released, the cyclic

moved fully aft and the throttle advanced. Having carried out these actions, as the gyroplane increases speed down the runway, the relative airflow will accelerate the rotor and at about 340 rpm the gyroplane will become airborne.

On this occasion, the pilot did not select aft cyclic before he began the takeoff roll. He realised that the takeoff was not proceeding normally at the same time as hearing his instructor, who was watching from beside the control tower, say "stick back" over the radio. The pilot pulled back on the cyclic, the gyroplane became airborne, pitched nose up and rolled left. The rotor blades struck the ground and the gyroplane came to rest

on its left side. There was no fire and the student, who was wearing a full harness and a helmet, received only minor injuries.

The student pilot commented that holding the cyclic in the forward position caused the rotor to decelerate during the takeoff roll and that pulling back on the cyclic resulted in retreating blade stall. He considered that he should have retarded the throttle and brought the gyroplane to a stop on the runway when he realised that he was using the incorrect technique. He could not

explain why he had not pulled the cyclic back before beginning the takeoff roll but thought that he may have been preoccupied with the cross-country flight on which he was about to depart. He had not made this mistake previously, with or without his instructor.

The student's instructor commented that he recalled saying "stop" over the radio. It was also reported that rejected takeoffs had been discussed during training but not practised due to the risk of a rollover accident.