

ACCIDENT

Aircraft Type and Registration:	P and M Aviation QuikR, G-HADD	
No & Type of Engines:	1 Rotax 912ULS piston engine	
Year of Manufacture:	2010 (Serial no: 8510)	
Date & Time (UTC):	5 June 2013 at 1734 hrs	
Location:	Manchester Barton Aerodrome	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - 1 (Minor)
Nature of Damage:	Damage to wings, propeller and pod	
Commander's Licence:	National Private Pilot's Licence	
Commander's Age:	50 years	
Commander's Flying Experience:	300 hours (of which 257 were on type) Last 90 days - 21 hours Last 28 days - 13 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The flex-wing microlight appeared to encounter wake or propeller wash turbulence on takeoff. The aircraft turned to the right and rolled over. The pilot and passenger escaped from the aircraft quickly and without difficulty.

Description of the event

The flex-wing microlight was taking off from Runway 09L for a local flight. The weather was fine, with a surface wind from 100° at 6 to 8 kt. The pilot waited for a Cessna Caravan to land before entering the runway and was subsequently instructed by the AFISO to take off at his own discretion. After a ground run of about 100 m, and as the pilot was about to move the control bar forward to lift off, he felt “a severe

‘pull’ down and back on the starboard wing”. With full power still applied, the aircraft turned violently to the right and rolled over. When the aircraft came to rest, the pilot and his passenger were able to escape from the aircraft quickly, without difficulty. All emergency services attended as part of the aerodrome’s emergency response procedure but were stood down soon afterwards. The pilot was uninjured but the passenger suffered minor injuries.

Pilot's assessment of cause

The pilot reported that he had never experienced anything similar in the past and had taken off from the same runway on many occasions. He considered the possibility that his passenger may have inadvertently

interfered with the flying controls but did not believe this occurred. He was of the opinion that the accident resulted from turbulence generated by the Cessna Caravan. However, he thought it was less likely to be wake turbulence generated on landing than turbulence resulting from the propeller wash from the comparatively large aircraft. He noted that the Cessna had vacated the runway before his microlight lined up but that it then came to a stop whilst its pilot sought taxi instructions. The Cessna then started taxiing again, to his right, immediately before the microlight started its takeoff roll.

The pilot considered himself familiar with the effects of wake turbulence and thought that his takeoff was started a safe period after the Cessna's landing. However, he had not considered the potential effects that the propeller wash could have on his takeoff. He thought that, in concentrating on the runway during takeoff, he had not seen a potential hazard to the side. He also observed that the radio exchange between the Cessna pilot and the AFISO could have alerted him.