ACCIDENT

Aircraft Type and Registration:	MCR-01 ULC, G-CENA
No & Type of Engines:	1 Rotax 912 ULS piston engine
Year of Manufacture:	2007
Date & Time (UTC):	21 April 2008 at 1815 hrs
Location:	Caunton Airfield, Nottinghamshire
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Substantial
Commander's Licence:	Private Pilot's Licence
Commander's Age:	Undeclared
Commander's Flying Experience:	473 hours (of which 103 were on type) Last 90 days - 6 hours Last 28 days - 2 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The aircraft made an uncommanded left turn on landing after encountering a gust of wind and was damaged when it entered a ditch.

History of the flight

The owner pilot was landing at Caunton Airfield, which has two perpendicular grass strips, one aligned east-west and the other which provides a north-north-easterly landing run. He chose the latter. He stated that the wind was from the north east at approximately 18 mph, with visibility of 7 km, a cloudbase at 2,100 ft and a temperature of +6.5ºC.

The pilot stated that, after landing, a gust of wind lifted the right wing and turned the aircraft towards a ditch at the left edge of the strip. He applied the brakes, switched off the engine and attempted to turn away from the ditch but found that "there was no response from the pedals or independent braking". He estimated that the aircraft entered the ditch at a speed of approximately 15 mph, sustaining damage to both wing leading edges and the landing gear. He vacated the aircraft without injury after switching off the fuel and electrical power.

The pilot's assessment of the cause was that a "freak gust of wind caught the right wing" and that subsequently he was unable to control the aircraft.

Aircraft information

The Dyn'Aero MCR-01 ULC is a high performance

low-wing two-seat microlight of composite construction with a tricycle landing gear. Brakes on the main wheels are operated by a hand lever on the control stick and can be applied differentially according to the position of the rudder pedals. The pilot did not report having experienced handling problems prior to this accident or any mechanical defect that might have contributed to the loss of control. The '*MCR ULC Flight manual*' produced by the manufacturer states that the maximum crosswind in which operation of the aircraft has been demonstrated was 20 kt. The steerable portion of the nose gear leg will self-centre when the leg is unloaded, such as when airborne.

Discussion

The investigation was unable to determine why the aircraft turned left at the end of the landing run. The reported wind would have had a crosswind component of less than the maximum in which operation of the aircraft has been demonstrated by the manufacturer. If, as reported, the wind was from the north-east and the right wing lifted, there would be a natural tendency for the aircraft to turn into wind (ie right), as demonstrated in a similar accident to another MCR-01, G-NONE[1]. If the right wing was lifted so severely that the left wingtip contacted the runway then this might have caused a swing to the left which would have been difficult to control. There was no evidence of wingtip damage, however. If the nosewheel was not firmly on the ground the pilot may have had little or no direct steering control, but it should still have been possible to apply differential brake.

Footnote

[1] Reported in AAIB bulletin 9/2005, reference EW/G2005/06/26.