

X'Air V2(2), G-CBTY

AAIB Bulletin No: 4/2004	Ref: EW/G2003/09/07	Category: 1.4
Aircraft Type and Registration:	X'Air V2(2), G-CBTY	
No & Type of Engines:	1 Rotax 582 piston engine	
Year of Manufacture:	2002	
Date & Time (UTC):	2 September 2003 at 1100 hrs	
Location:	Newtownards Airfield, Northern Ireland	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Loss of port wheel and brake drum. Minor damage to port brake backplate	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	54 years	
Commander's Flying Experience:	1,260 hours (of which 20 were on type)	
	Last 90 days - 164 hours	
	Last 28 days - 61 hours	
Information Source:	British Microlight Aircraft Association (BMAA) Incident Report Form submitted by the pilot.	
	Discussion with technical staff of the BMAA.	
	Documentation supplied by BMAA.	

The microlight aircraft was being flown under B conditions on the final hour of its five hour check programme for the issue of a Permit to Fly. The pilot reported that all pre-flight actions had been completed, including checking the condition of the tyres, wheels and brakes. All appeared normal and the aircraft remained in the circuit after takeoff. It completed three circuits prior to the final landing on Runway 04.

At touch-down it very quickly became apparent that the port main wheel was missing and the aircraft had landed on the corresponding brake backplate. Apart from wear on the lower edge of the backplate the aircraft suffered no damage. Both the port wheel and its associated brake drum had disappeared, and were not recovered. Inspection revealed that the wheel retaining bolt was missing and had unscrewed from the stub axle. The relevant document (BMAA /AW/029), permitting flight under B conditions, was accordingly suspended by the British Microlight Aircraft Association (BMAA).

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The pilot commented that as the retaining bolt was a standard right-hand thread it appears to be able to unscrew when the wheel rotates in a forward direction. There is no locking mechanism.

The BMAA issues a Type Data Sheet for this aircraft type. Annex E of this document covers 'Points For Special Attention', which highlights commonly recurring problems. These include, at item 4, 'Failure to apply proprietary threadlocking compound to the wheel hub bolts'. It appears that such an oversight occurred on this machine.