

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	X' Air R100, G-CBPU	
<b>No &amp; Type of Engines:</b>	1 BMW R100RS piston engine	
<b>Year of Manufacture:</b>	2002	
<b>Date &amp; Time (UTC):</b>	17 December 2006 at 1335 hrs	
<b>Location:</b>	5 miles SE of Wellesbourne, Warwickshire	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - 1
<b>Injuries:</b>	Crew - None	Passengers - None
<b>Nature of Damage:</b>	Moderate damage to nose wheel, left mainwheel and pod	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	47 years	
<b>Commander's Flying Experience:</b>	280 hours (of which 268 were on type) Last 90 days - 18 hours Last 28 days - 4 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

**Synopsis**

Following an engine failure, the pilot carried out a forced landing but the aircraft ran into a hedge at the end of the landing roll.

**History of the flight**

The X' Air R100 is a three-axis microlight type. On the second flight of the day, the pilot took off from Tatenhill Airfield for a flight to Long Marston Airfield. The weather was good with a surface wind of 280°/10 kt.

After approximately an hour, with the aircraft level at 1,800 ft amsl, the engine power suddenly reduced by about 50%. The pilot declared a 'MAYDAY' and selected a suitable field for an emergency landing. His

options were limited and the most suitable field was at the top of a hill at an elevation of about 400 ft amsl. The pilot used the engine power available to position G-CBPU for a landing into wind; he did not wish to reduce power to idle as the aircraft has a high sink rate at that power setting. However on finals the engine stopped completely and the pilot then found himself landing short of his target field. He landed in the undershoot field but he was unable to stop the aircraft before it ran into a hedge dividing the two fields.

Shortly afterwards, a helicopter arrived on the scene from a nearby aerodrome followed soon after by a police helicopter.

**Subsequent investigation**

The pilot stated that the engine relied upon the alternator and battery to maintain correct operation of the engine ignition, timing and fuel pump. During the subsequent

investigation, he identified faults with the alternator that led to a low battery voltage which he had noticed in flight shortly before the engine lost power.