

Quad City Challenger II, G-MZEA

AAIB Bulletin No: 8/2003	Ref: EW/G2003/05/17	Category: 1.4
Aircraft Type and Registration:	Quad City Challenger II, G-MZEA	
No & Type of Engines:	1 Hirth 2706 piston engine	
Year of Manufacture:	1997	
Date & Time (UTC):	26 May 2003 at 1800 hrs	
Location:	Ansty, near Westside, Leicester	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Nose wheel and left main gear damaged	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	58 years	
Commander's Flying Experience:	375 hours (of which 152 were on type)	
	Last 90 days - 7 hours	
	Last 28 days - 2 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further telephone enquires by AAIB	

The aircraft was on a flight from a farm strip near Leicester and part of the flight was to assess the suitability of a farmer's field near the village of Anstey for a new private airstrip. Whilst approaching this field at around 1000 feet, there was a sudden loss of engine power. The pilot/owner initially selected another field for a forced landing but then he deemed this to be too far away and considered that there was a high risk of impacting trees during the approach. Another field was selected, which entailed a 60° turn, and this required him to carry out an intentional stall into a wheat crop that was growing in the field. The landing was abrupt and caused damage to the nose wheel and left main gear. Both the pilot and passenger, who were wearing four point harnesses, were uninjured and exited the aircraft unaided.

Whilst the aircraft was prepared to be recovered from the field, the pilot discovered that one of the spark plugs had come out of one of the engine cylinders. The spark plug was found still attached to its plug cap. Further inspection of the aluminium cylinder head revealed that the spark plug had been working loose over an undetermined period of time and that the plug had reached a point where just the last three or four threads retained it in place. Vibrational movement of the plug had then progressively worn these threads, to the extent that the plug could no longer be retained, after which it was ejected from the cylinder head.

Document title

The pilot could not remember exactly the last time the spark plugs were disturbed, but thought that it was probably about a year before the accident. Since that time the aircraft had been operated for about 27 hours. He had not checked the spark plugs for security at all during this time and he reported that there were no recommendations from the engine manufacturer to do so.