

ACCIDENT

Aircraft Type and Registration:	Cyclone AX2000, G-BYJM	
No & Type of Engines:	1 HKS 700E piston engine	
Year of Manufacture:	1998 (Serial no: 7523)	
Date & Time (UTC):	8 September 2015 at 1535 hrs	
Location:	Manton, near Marlborough, Wiltshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - 1 (Minor)	Passengers - 1 (Minor)
Nature of Damage:	Fuselage tube snapped, landing gear collapsed, forward compression strut snapped, and deformation of cockpit tube frame	
Commander's Licence:	National Private Pilot's Licence	
Commander's Age:	48 years	
Commander's Flying Experience:	214 hours (of which 39 were on type) Last 90 days - 33 hours Last 28 days - 16 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

During the outbound flight from Clench Common, the pilot felt that the aircraft was unable to maintain altitude and he performed a precautionary landing at a nearby airfield to investigate. Following checks of the airframe and engine, he took the aircraft for a solo circuit, during which it performed normally. He decided to return to the departure airfield with his passenger but, shortly after takeoff, the engine power again appeared to be insufficient to maintain altitude. The pilot decided to force-land in a field, during which the aircraft was badly damaged. No reason was found why the engine might not have been able to deliver full power.

History of the flight

The pilot and his passenger had taken off from Clench Common airfield on a local flight, having performed the usual pre-flight inspections including a check for water in the fuel; none was found. As they passed Manton Airfield at an indicated height of 1,100 ft, the pilot felt that the aircraft was struggling to maintain height, although all other aspects of the flight seemed normal. He suspected he had encountered an area of sink and applied full power, finding that this was just sufficient to maintain height; however he decided to land at Manton as a precaution. After landing he performed an external check of the aircraft, finding nothing untoward so he decided to do a solo circuit. This, including the

pre-flight checks, was normal and he concluded that his earlier suspicion of encountering an area of sink was probably correct.

He therefore decided to return to Clench Common with his passenger. During takeoff and climbout, at 50 kt and using full throttle, the aircraft performed normally until about 200 ft agl, when it again appeared to stop climbing and indicated airspeed decayed. The pilot decided to abandon the journey and considered a forced-landing in a field, finding that a recently harvested wheat field to the right of the runway extended centreline seemed suitable. However, as he turned towards it, the right wing dropped sharply, probably due to a stall or partial stall. Upon recovery, he found that they were now heading roughly at 90° to the centreline, so he decided to continue the turn in order to land downwind on a grass field to the south of the runway.

As the aircraft neared the ground, the pilot was aware that the terrain was rising towards them, so he closed the throttle to avoid “powering into the ground” even though he was having to maintain airspeed by pushing forward on the control column. He was also aware that the groundspeed was quite high as they were landing downwind and he tried to flare into the rising ground. His recollection of events at this point was partial, but he believes that the sense of speed and rapid closure with the ground caused him to pull back too far on the column, leading to a stall. The aircraft struck the ground and came to rest some 5 to 8 m further on.

The two occupants suffered only minor injuries and were able to evacuate the aircraft unaided, although photographs suggest that the nose and forward fuselage were badly disrupted. Although the pilot felt that engine performance may have been degraded, it was only a vague perception at the time and he did not look at the rpm gauge during the flight to ascertain whether or not full power was being developed.