ACCIDENT

Aircraft Type and Registration:	Zenair CH 701UL, G-EOIN
No & Type of Engines:	1 Verner SVS1400 piston engine
Year of Manufacture:	2000
Date & Time (UTC):	7 October 2010 at 1400 hrs
Location:	Private airstrip, Easter Nether Cabra, Fetterangus, Aberdeenshire
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Extensive
Commander's Licence:	Private Pilot's Licence
Commander's Age:	59 years
Commander's Flying Experience:	1,544 hours (of which 251 were on type) Last 90 days - 9 hours Last 28 days - 2 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The aircraft suffered a power loss shortly after takeoff. It was extensively damaged during the subsequent forced landing when it struck the upslope of a deep hollow that was not visible from the air. The power loss was thought to have been caused by an ignition system failure.

History of the flight

The pilot reported that he took off from the north-easterly runway of the farm strip, turning right after takeoff. The wind was from the south-east. When climbing downwind to the south-west, at a height of approximately 400 ft, the engine lost virtually all power. The pilot immediately commenced a descending turn to the right, crossed overhead the runway and continued to turn right to head back into wind. At this point the aircraft was at a height of between 150 and 200 ft, in a steep gliding descent, with a high rate of descent. The pilot realised he would not be able to reach the runway, but expected to achieve a satisfactory landing ahead in a freshly cultivated field. Although he commenced a rapid round out, the aircraft struck the ground heavily, coming to a sudden stop. Major damage occurred to the landing gear, engine mount, cabin floor, rudder pedals and numerous other components.

Additional information

The pilot stated that on assessing the reason for the heavy and destructive landing, he noted that his impact

point was on the upslope of a deep hollow that had not been visible from the air. The soft ground of the upslope had brought the aircraft to a rapid halt.

Initial examinations by the pilot following recovery of the aircraft did not identify any mechanical failure within the engine. However, subsequent tests revealed both ignition circuits to be apparently inoperative. The pilot stated that although the aircraft was not fitted with carburettor heat, he had not experienced symptoms of carburettor icing during his ownership and the ambient conditions at the time of the accident did not suggest a high humidity.