
ACCIDENT

Aircraft Type and Registration:	Glasair, EI-CTG	
No & Type of Engines:	1 Lycoming IO-360 piston engine	
Year of Manufacture:	2007	
Date & Time (UTC):	12 July 2009 at 1315 hrs	
Location:	3 miles northeast of Enniskillen Airfield, Co Fermanagh	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - 1 (Minor)	Passengers - 1 (Minor)
Nature of Damage:	Aircraft destroyed	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	61 years	
Commander's Flying Experience:	1,017 hours (of which 717 were on type) Last 90 days - 11 hours Last 28 days - 7 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and subsequent AAIB enquiries	

Synopsis

The aircraft was cruising at about 3,000 ft when the engine cut out, requiring the pilot to make a forced landing. The pilot considers the engine stopped due to water in the fuel which had not been apparent during the pre-flight fuel checks. He believes the water entered the fuel system because the aircraft had been parked in the rain prior to the flight.

History of the flight

The aircraft had flown to Prestwick in Scotland without incident three days prior to the accident and had been left parked outside. On the day of the accident the pilot intended to fly back to the aircraft's home base at Abbeyshrule in Ireland, via a refuelling stop

at Enniskillen. The pilot stated that he had visually checked the fuel quantity prior to departure and that the header tank was full and the main tanks about a quarter full, giving an endurance of about two hours. This was sufficient for the intended flight. He also stated that he had completed a drain check on all the tanks and found no evidence of water in the fuel.

After departure the pilot had switched fuel selection from the main tank to the header tank and climbed to a cruising altitude of 3,000 ft. He reported the flight proceeded without incident until the aircraft was approximately 12 miles from Enniskillen when the engine cut out. Believing it to be a fuel problem the pilot selected the

main tank and turned the booster pump on. The engine did not respond and the pilot then re-selected the header tank and then the main tank again, but to no effect. He notified Enniskillen of the engine failure and selected a field in which to make a forced landing. The field he chose was not particularly long and so he elected to land with the wheels up in an attempt to reduce the landing distance. The aircraft touched down and came to a halt within the field but the landing badly damaged the aircraft. The pilot was able to vacate the aircraft unaided through his door but the passenger had to be cut free from the aircraft by the emergency services.

Subsequent examination

As the aircraft was destroyed in the accident it has not been possible to ascertain whether the engine failure was due to a mechanical problem.

The pilot reported that after the accident he tested a sample of fuel from the header tank and that this contained significant amounts of water. He believes

this was sufficient for the pre-departure test sample to have only contained water and therefore he had not been able to detect a water/fuel interface when doing the test. The aircraft was normally stored in a hangar and had operated without problem on the flight to Prestwick. During the time the aircraft was parked at Prestwick it had rained moderately at various times and the pilot considers it possible that water had entered the fuel tanks as a result.

Comment

The investigation was unable to establish a definite cause of this accident. Although the engine may have cut out due to contamination of the fuel by water, it might be expected that the significant levels of water described by the pilot, would have become apparent earlier in the flight. The accident reinforces the importance of ensuring fuel cap seals are kept in good condition and that a sufficient amount of fuel is checked for water on each occasion prior to flight.