

No: 4/89

Ref: EW/G89/01/05

Category: 1c

Aircraft Type and Registration: Piper PA38-112, G-BGET

No & Type of Engines: 1 Lycoming O-235-L2C piston engine

Year of Manufacture: 1978

Date and Time (UTC): 10 January 1989 at 1535 hrs

Location: Near East Lavant, West Sussex

Type of Flight: Training

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Substantial

Commander's Licence: Private Pilot's Licence with IMC, Night and Assistant Instructor ratings

Commander's Age: 27 years

Commander's Total Flying Experience: 687 hours (of which 339 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot, meteorological records and engineering report

During the fourth take-off, with a post solo student, the instructor informed the student that they would practice an engine failure after take-off. At about 600 feet agl the instructor closed the throttle to simulate an engine failure. The student reacted correctly and at the end of the practice he was instructed to "go around". At no time during this exercise was the carburettor heat selected to HOT. The student advanced the throttle to the fully open position, but the engine failed to respond and continued to idle. The instructor took control and checked that the carburettor heat was selected to COLD, the throttle was fully open and the mixture was fully rich. Full flap was set and a sideslip was made into a ploughed field. Shortly after touchdown the aircraft's nosewheel, followed by the propeller, dug into the soft ground causing the aircraft to come to rest inverted. The occupants had difficulty in escaping because the weight of the aircraft was resting on the door tops which rendered the doors impossible to open. They managed to escape through the rear window of the cockpit, which had become dislodged.

The aircraft was inspected by an engineering organisation and no obvious engine fault was found. The carburettor was sent to an approved overhaul organisation, tested and strip examined. No fault was found that would have accounted for the lack of response from the engine when the throttle was opened.

The weather recorded by ATC at Goodwood on 10 January at 1550 hrs was CAVOK, calm, temperature 07°C, dew point 04°C. When these figures are plotted on a carburettor icing probability chart they give a prediction of "serious icing at any power". At the time of the accident the aircraft was using Avgas 80 fuel. Since the accident, the flying club use Avgas 100 fuel for their remaining PA 38 Tomahawk aircraft.