

No: 10/91

Ref: EW/G91/08/15

Category: 1c

Aircraft Type and Registration: Piper PA-18-150 Super Cub, G-BGWH
No & Type of Engines: 1 Lycoming O-320-A2B piston engine
Year of Manufacture: 1961
Date & Time (UTC): 15 August 1991 at 1945 hrs
Location: 3 nm north east of Clacton Airfield, Essex
Type of Flight: Private
Persons on Board: Crew - 2 Passengers - None
Injuries: Crew - None Passengers - N/A
Nature of Damage: Damage to top of rudder and left wing strut
Commander's Licence: Commercial Pilot's Licence with Instrument rating
Commander's Age: 41 years
Commander's Flying Experience: 1,284 hours (of which 271 were on type)
Information Source: Aircraft Accident Report Form submitted by the pilot

The flight had been planned to give a PPL holder some upper air familiarisation with the Super Cub. This was completed and with nightfall approaching the aircraft returned to the airfield. After turning onto base-leg the instructor asked the pilot in the front seat to lower the first stage of flap. As this was being done it was apparent that the engine rpm, which had been reduced to slow the aircraft below flap limiting speed, had decayed to around 1000. Operation of the throttle throughout its range of movement produced no response from the engine beyond a slight 'coughing' at the low power end. The selection of carburettor heat and changing fuel tanks also had no effect. The instructor took over at this point but from their height of 700-800 ft he estimated that it was not possible to reach the airfield. The aircraft was therefore turned away from a nearby housing estate and a forced landing field was selected.

Following a Mayday call to Clacton, the aircraft was landed in the field, which was found to contain a standing crop. This resulted in a rapid deceleration which caused the aircraft to 'nose-over' gently onto its back. Both crew vacated the aircraft without injury. The instructor later commented that in the fading light, the surface of the chosen field appeared similar to that of adjacent fields which had already been cut.

The flying club's maintenance organisation examined the engine and found that the No 2 cylinder inlet valve had stuck open, thus causing the power loss. Once freed however, the valve appeared to operate normally. The valve guide clearance was not found to be excessive and there was no more than the normal amount of carbon deposit on the stem. The engine had achieved a total time of 1621 hours and had been fitted with new valves at 330 hours. Good compression figures had been recorded at the most recent 50 hour inspection, which was carried out some 27 hours before the accident. It was thus not apparent why the valve had stuck open, although the maintenance organisation considered that the spring within the tappet barrel may have become temporarily displaced, thereby allowing oil pressure within the tappet to build up and keep the valve open.

Information Source:	Accident Report Form submitted by the pilot and updated by AAR
Commander's Flying Experience:	28 hours (24 with on type and 180 on gliders)
Commander's Age:	29 years
Commander's Licence:	Private Pilot's Licence
Nature of Damage:	Front - low engine mount and firewall pulled back Wing skins ripped and wing struts buckled
Injuries:	Crew - Minor Passengers - None
Persons on Board:	Crew - 1 Passengers - 1
Type of Flight:	Private
Location:	Crowland

The aircraft was returning to Crowland after a flight to Skegness, the flight time being about 30 minutes in each direction. Before leaving Crowland for Skegness the pilot had established that he had approximately 100 litres of fuel on board and he states that the left-hand fuel tank was selected throughout the return flight to Crowland.

On arrival at Crowland, the pilot states that he joined the cross-wind leg of a left-hand circuit for runway 09 and completed the 'downwind' checks, including the use of carburettor heat. After turning final the carburettor heat control was returned to 'cold' and the approach continued down to about 75-100 feet a.g.l. at which point the pilot elected to 'go around'. The pilot states that the engine responded normally, produced full power for 10-15 seconds and that the aircraft had gained 250-300 feet when the engine suddenly lost all power. The pilot lowered the nose and selected the right-hand fuel tank and carburettor heat but with no effect on the engine. By this point the aircraft was close to the intersection between the two runways and the pilot elected to land on the remaining 400 metres of runway 03, turning left and sideslipping. The aircraft touched down with some 75 metres of runway