

AAIB Bulletin No: 3/96

Ref: EW/G95/12/06

Category: 1.3

Aircraft Type and Registration: Cessna F150L, G-MABI

No & Type of Engines: 1 Continental O-200-A piston engine

Year of Manufacture: 1973

Date & Time (UTC): 28 December 1995 at 1522 hrs

Location: 0.5 miles east of Gloucestershire Airport

Type of Flight: Private (Training)

Persons on Board: Crew - 2 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Nose landing gear collapsed; extensive damage to airframe and engine mountings

Commander's Licence: Airline Transport Pilot's Licence with Instructor Rating

Commander's Age: 30 years

Commander's Flying Experience: 1,398 hours (of which 500 were on type)
Last 90 days - 168 hours
Last 28 days - 28 hours

Information Source: Aircraft Accident Report Form submitted by the pilot; supplementary telephone inquiries to repair agency and insurance assessors

The instructor had de-iced the aircraft during the morning and had carried out a full 'A' check, which included checking all fuel drain points for water. Prior to the accident flight, the instructor sent his student out to carry out an 'A' check, for the student's own benefit, and watched him do this from the club house. The student's checks appeared thorough, and included the fuel drains; he then joined the student. The engine was started without difficulty and following a taxi of approximately 1 mile to Runway 09, the power checks were completed normally.

The takeoff and first circuit proceeded without incident, but at a height of approximately 150 to 200 feet during the climb out from the first 'touch-and-go', with the student handling, the engine suddenly lost power. The instructor immediately took control and 'pumped' the throttle, which restored power for 1 to 2 seconds, but the engine then lost all power again. He selected the only suitable field which he felt was within gliding distance, transmitted a 'MAYDAY', and turned the aircraft to the left through approximately 100° in a "low slipping turn", lowering full flap as he did so,

in order to avoid telephone cables across the landing field. The aircraft touched down under the wires and full brakes were applied, but the aircraft ran through a hedge at the far end of the field at a speed of some 15 to 20 mph. The nose leg then collapsed, and the aircraft pitched over onto its back and came to rest inverted. Both occupants, who were uninjured, vacated the aircraft through the doors.

The aircraft had no history of engine-related problems of any kind, and the instructor attributed the engine failure most probably to some form of fuel starvation which he believed may have been caused by ice in the fuel, even though no visible water was present when the drains were checked. It is understood that approximately 7 gallons of fuel were recovered from the aircraft after the accident. The carburettor, however, had broken away from the engine when the nose gear collapsed and the associated fuel bowl had fractured. Consequently, it was not possible to establish whether fuel had been present at the carburettor prior to touchdown.

The aircraft was being operated on AVGAS. The reported temperature at the time of the accident was -2°C, and the dewpoint was -5°C.