## Reims Cessna F152, G-BXYU

AAIB Bulletin No: 10/99 Ref: EW/G99/08/02 Category: 1.3

Aircraft Type and Registration: Reims Cessna F152, G-BXYU

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

Year of Manufacture: 1980

**Date & Time (UTC):** 2 August 1999 at 1425 hrs

**Location:** Beacon View Farm, Drewsteignton, Devon

**Type of Flight:** Private (Training)

**Persons on Board:** Crew - 2 - Passengers - None

**Injuries:** Crew - None - Passengers - N/A

**Nature of Damage:** Extensive

Commander's Licence: Basic Commercial Pilot's Licence with Instructor Rating

Commander's Age: 63 years

**Commander's Flying Experience:** 2,283 hours (of which 1,850 were on type)

Last 90 days - 111 hours Last 28 days - 37 hours

**Information Source:** Aircraft Accident Report Form submitted by the pilot

The aircraft was on a flight from Eggesford Airfield to Exeter Airport as part of a PPL licence renewal programme. It was decided to carry out a practice forced landing from about 2,000 feet onto the private landing strip at Beacon View Farm. This strip was owned by the pilot undertaking the licence renewal programme. This exercise was to be followed by a touch and go landing on the strip.

According to the instructor, the initial touchdown on the strip was normal at the start of the 324 yard long westerly runway. The wind was reported as being from southwest at about 6 kt, and the ambient temperature was about +25°C, dew point +14°C. After touchdown, the flap was raised from 30° to 20°. Shortly after the aircraft became airborne again, the instructor became aware that it was not achieving a normal climb rate, so he took over control of the aircraft. The airspeed was apparently correct and the engine appeared to be at full power but the aircraft would not climb. The instructor elected to close the throttle and land the aircraft straight ahead, being aware of the proximity of power cables to the left side of the aircraft, farm buildings ahead and rising ground to the right side.

The aircraft touched down heavily, the nose landing gear collapsed, the aircraft nosed over and came to rest inverted with its tail in the hedge at the far end of the strip. Both pilots were wearing

lap and shoulder harnesses which held them both in position and prevented injuries. There was no fire and both occupants escaped from the aircraft through each of the side doors.

The instructor commented that subsequent advice from locally based pilots suggested that the aircraft may have experienced a degree of downdraught caused by local terrain to the south of the strip.

Reference to the carburettor icing probability chart, given the ambient conditions at the time, indicated that there existed a serious risk of carburettor icing at descent power. The instructor indicated that the carburettor heat had been applied throughout the practice forced landing procedure and that the engine had been 'warmed' when descending through about 1,000 feet during the exercise. The carburettor heat had been returned to the cold position just prior to the touch and go. The instructor was sure that the engine was developing full power at the time. Therefore, it is likely that a combination of ambient conditions and some downdraught accounted for the apparently poor climb performance experienced.