AAIB Bulletin No: 3/2005 Ref: EW/G2004/07/22 Category: 1.3

Aircraft Type and Registration: Reims Cessna FA152, G-BGLN

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

Year of Manufacture: 1979

Date & Time (UTC): 27 July 2004 at 1545 hrs

Location: Ingleby Cross, Northallerton, Yorkshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Substantial damage

Commander's Licence: Private Pilot's License

Commander's Age: 28 years

Commander's Flying Experience: 152 hours (of which 116 were on type)

Last 90 days - 27 hours Last 28 days - 12 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft was being flown on a navigation exercise from Bournemouth to Teesside Airport and had been refuelled with 86 litres of fuel, which would give an endurance of approximately 3.9 hrs. The wind was variable at 5 kt with 15 to 20 km visibility and a cloud base at 2,500 feet.

After approximately 2.7 hrs, and 16 miles SSE of Teesside, the engine started to run roughly. The pilot selected CARB HEAT and initially the engine ran smoothly before it again ran roughly with a loss of power. As the pilot was experiencing difficulty in maintaining height he made a PAN call to Teesside Approach Radar who responded by giving the QDM and miles to run to the airfield. Approximately five minutes after the initial loss of power the engine stopped and the pilot declared a Mayday. Despite selecting full flap and making a number of S turns, the aircraft touched down half way into the selected field at 70 kt before running through a hedge at its far end at approximately 40 kt. The nose wheel collapsed and the aircraft came to rest 10 metres beyond the hedge in a nose down attitude. The pilot and passenger, who were secured by four point harnesses, were uninjured and made a successful egress through the cabin doors.

The Head of Training from the pilot's flying club visited the crash site the following day when he operated the engine fuel drain and observed a steady stream of Avgas. The pilot believes that the engine failed due to carburettor icing. A radiosonde ascent to the west of the crash site showed the airmass at the time of the accident to be reasonably moist at 6,000 ft and the temperature dew point recorded at Teesside at 15.50 hrs was 22°C/12°C. Reference to a carburettor icing chart showed that these conditions are conducive to moderate icing at cruise power.