

No: 11/90

Ref: EW/90/05/23

Category: 1c

Aircraft Type and Registration: Jodel DR1050, G-BHOL

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

Year of Manufacture: 1964

Date and Time (UTC): 25 May 1990 at 1220 hrs

Location: Gairloch Locks, Spean Bridge, Invernesshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Substantial damage to left wing, landing gear, engine and propeller.

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

Commander's Age: 47 years

Commander's Total Flying Experience: 598 hours (of which 45 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot

The pilot reported that the aircraft had been flown earlier in the day without incident. It was then refuelled to capacity with four star mogas obtained from a busy filling station.

Prior to the intended flight from Dalcross to the Isle of Mull, the pilot visited the Dalcross meteorological office and obtained the Airmet forecast and the Terminal Area Forecast for Tiree. Conditions appeared good with an anticyclone centred over Scotland, a light and variable surface wind at Dalcross, the 5000 ft wind being forecast as 10-15 knots North-Westerly. The Dalcross 1150 hrs meteorological report gave a temperature of 10.7°C and a dew point of 0.9°C, with a relative humidity of 51%. The Airmet upper air temperature forecast for 5000 ft was minus 2°C, cloud was forecast as scattered cumulus base 4000 ft, tops at 5500 ft. The Tiree report obtained gave the wind as 010°/8 kts, more than 10 km. visibility with one octa cumulus at 2500 ft and a temperature of 11°C; a landing forecast of wind 050°/8 kts with two octas cumulus at 2500 ft.

At 1241 hrs, the aircraft departed Dalcross on a direct track to Glenforsa, Mull, and climbed to 6000 ft, which was about 500 to 1000 ft above scattered cumulus. At about 1313 hrs, while in the cruise at 100 kts and 6000 ft, a light vibration was noted. The pilot applied carburettor heat and turned towards the Great Glen. Carburettor heat had been applied every 3 to 5 minutes since departure from Dalcross. Less than a minute later, with the vibration continuing, the electric fuel pump was switched on, the fuel

supply switched from the rear tank to the front tank, the magneto switch checked at "both" and the mixture control checked at fully rich. The pilot recollected that the engine speed was close to the normal cruising 2500 rpm at this point. About 1 to 1½ minutes after the vibration started, the pilot cycled the throttle, and thereafter full throttle provided only about 1500 rpm, resulting in a 500 fpm descent rate. As the aircraft descended through 3500 ft, the pilot called Scottish Information advising that the aircraft had lost power and was about to make a forced landing near Loch Lochy. The call was relayed by a commercial aircraft.

At about 2000 ft the throttle was again cycled and this resulted in a further reduction in available rpm to 1200. The pilot elected not to shut down the engine due to its possible assistance if an undershoot developed. The field selected was the longest available, but the approach was obstructed by a 33kv power line. On final approach the direction chosen for landing was initially over some trees. These were cleared successfully, but a rapid descent was then required to pass under the power line. The aircraft touched down just before the power line at about 60 kts, with only some 180 metres of landing run remaining. A fence at the edge of a canal was approached rapidly and the pilot elected to ground-loop the left wing into the fence. The aircraft came to a rapid stop and both landing gear legs collapsed on contact with a sharp ledge between the bridle path and the field.

The reported examination of the engine revealed apparently normal compressions on all cylinders; the electric fuel pump functioned normally and samples of fuel showed no evidence of contamination by dirt or water. The pilot suggested that the most likely cause of the power-loss was carburettor icing due to the proximity of cloud 500 to 1000 feet below the aircraft, possibly with supercooled water droplets to which the aircraft may have been exposed.