

No: 8/90 **Ref: EW/C1157** **Category: 1c**

Aircraft Type and Registration: Rollason Draine D.62C Condor, G-AZMV

No & Type of Engines: 1 Rolls-Royce Continental O-240-A piston engine

Year of Manufacture: 1972

Date and Time (UTC): 28 April 1990 at 1435 hrs

Location: Tibenham Airfield, Norfolk

Type of Flight: Private (glider towing)

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - 1 (fatal) Passengers - N/A

Nature of Damage: Aircraft destroyed

Commander's Licence: Private Pilot's Licence

Commander's Age: 36 years

Commander's Total Flying Experience: 329 hours (of which 1 was on type)

Information Source: AAIB Field Investigation

On the morning of Saturday 28 April the pilot joined the Norfolk Gliding Club, at Tibenham Airfield.. He read, and signed as having read, both the Flying Club General Gliding Orders and the Tug Pilot Flying Orders. After a briefing by the Tugmaster he was shown the layout of the Condor cockpit and was taken through the Daily Inspection routine. This was followed, at 1210 hrs, by a 33 minute flight, with an instructor, in a K13 glider.

An aftercast for the period, obtained from the Meteorological Office at Bracknell, indicated that there was a westerly airflow over the area which was very dry at low levels. The surface temperature was 16° C and the dew point was 3° C, which gave a relative humidity of 43%. The surface wind was 230°/10 kt and the visibility 20 km.

G-AZMV was refuelled, to full, at about 1245 hrs. It then remained on the ground until, at 1309 hrs, the pilot carried out a glider tow under the supervision of the Tugmaster. This was followed by a further tow at 1319 hrs and, at 1336 hrs, they took-off again to carry out some general handling, local area familiarisation and circuit flying. The aircraft landed at 1408 hrs, the Tugmaster got out and the pilot flew some more circuits until 1422 hrs. The aircraft was then shutdown until shortly after 1430 hrs.

A glider was attached to the tow rope and the combination took-off, from runway 21, at 1435 hrs. At about 150 to 200 feet, the tug engine was heard to "cough and splutter" and then stop. It was seen to emit two puffs of black smoke. Initially, the aircraft carried on straight ahead and the wings were rocked from side to side, the wave-off signal to the glider pilot. The glider immediately released and banked left, however, noticing that the tug had also banked left, the glider pilot reversed his turn and landed safely back on the airfield. The tug continued in a steeply banked descending left turn until shortly before impact, when it rolled to the right.

There was no fire and club members were rapidly on the scene. Having switched off the magnetos and electrics master switch, they released the pilot and moved him a short distance from the main wreckage.

The accident site was on a flat grassed area that was approximately 200 yards to the south-east of the southern end of the runway. The surrounding area was flat agricultural land interspersed with farms, hedgerows and farm tracks. The land immediately to the south of the runway consisted of a small grass area beyond which there was a large field of oil rape seed crop.

Examination of the accident site showed that the aircraft had impacted the ground with an approximate speed of 60 kt, a 6° nose pitched down attitude, a 60° bank to the right and skidding to the left. Evidence from marks cut into the ground by the propeller indicated that it was rotating at approximately 2000 rpm at impact. This evidence would indicate that the engine was producing power when the aircraft impacted the ground. The aircraft's fuel tank, which had been ruptured by the impact, was found to contain 1.2 imp gal of the correct type of fuel and the tank walls had evidence of hydraulicing which would indicate that a reasonable quantity of fuel was present at impact. The fuel cock was found in the ON position. There was no evidence that any part of the aircraft had been disrupted or fallen away prior to impact.

A detailed examination of the fuel system did not reveal any fault that would have caused the engine to fail due to lack of fuel reaching the carburettor. Strip examination of the carburettor did not reveal any fault, although there was no evidence of fuel in the carburettor bowl. The throttle was found in the OPEN position, the fuel mixture lever in the RICH position and the carburettor air in the COLD position. A strip examination of the engine and testing of the ignition system was carried out and no failures that could have resulted in a reduction or loss of power were found. An examination of the flying control cables showed that there had been no impact failure, disconnection or restriction. There was no evidence of any defect or failure that could have contributed to the accident.

Post mortem examination of the pilot revealed no pre-existing medical condition which was considered to have contributed to the accident.