

1. Factual Information

This was a ridge run along the South Downs ridge, out of Parham, flown by a Parham Instructor in his Shark, with wind 340°118kt. During the flight, the pilot successfully crossed 'the Steyning Gap', east of Chanctonbury Hill and continued eastwards to Lewes. On returning west, he crossed the Steyning gap westbound and decided to gain height above the bowl to the east of Chanctonbury Ring, to give enough height for a comfortable return to Parham. At this point the pilot felt a 'push' from behind and the glider fell into a steep dive which resulted in impact with trees on the slope. The trees arrested the glider above ground level. Locating and accessing the site was difficult and the emergency services took almost 4 hours to secure the glider in the trees, allowing a coastguard helicopter winchman to safely extract the pilot, who was uninjured.

1.1 History of the Flight

Flight time was 2:45.

1.2 Injuries to Persons

None

1.3 Damage to Aircraft

Fuselage snapped forward of fin. All airframe components suffered damage to a significant extent. The cockpit and canopy were intact.

1.4 Other Damage

None

1.5 Personnel Information

Male, 59 years. LAPL Medical, EASA FI, 887 hrs gliding.

1.6 Aircraft Information

SharkSLMG

1.7 Meteorological Information

Wind generally 350°118kt at flying height. Almost blue, good visibility, weak thermal activity to 1500ft. Light turbulence only.

1.8 NIA

1.9 Communications

A Parham pilot following a few minutes behind the Shark saw the glider in the trees. He called Mayday on 129.98. This was relayed on 121.5 by another glider on the ridge. Parham was called and a club member called 999 on his mobile phone. He was the club contact from then on. An airborne glider gave Lat. and Long. to Parham, which was passed to emergency services, who were having difficulty locating the glider. The 999 line remained open for half an hour until they reached the site. Damage to the glider's radio antenna precluded communication with the pilot. The pilot did not carry a PLB.

1.10 Accident Site Information

This was on the east-facing side of a bowl on the east side of Chanctonbury Ring, in moderately thick trees. The impact point was about 350ft above the ridge foot, and about 80ft below the crest. The glider was suspended several feet above the ground in a steep nosedown attitude. It was facing in the opposite direction to its approach. See Figs 1 and 2

1.11 Flight Recorders

See attached trace

1.12 Wreckage and Impact Information

The left wing struck trees on the ridge, sloping up on the glider's port side, resulting in a yaw to the left, leaving the glider facing back along its track, steeply nose down.

1.13 Medical Information

Norie relevant

1.14 N/A

1.15 Survival Aspects

The trees cushioned the impact to the extent that the pilot was uninjured. It is not possible to say whether the crashworthiness of the Shark design contributed to the cockpit's remaining intact.

1.16 to 1.19 N/A

2. Analysis

Although the wind conditions were not ideal for a fast ridge run, this was not the pilot's intention and the conditions were not challenging for a pilot of his experience, in a Shark. The trace shows a conservatively flown flight for 2:45 with adequate speed throughout, and time spent topping up on height to cross the gaps.

The final upset was not due to contact with trees or terrain, as the glider was slightly higher than the crest, and over the slope. The rapid loss of airspeed on the trace is unlikely to have been a pilot induced stall. It does not show the hallmarks of an inadvertent stall with slow entry, and the high rate of IAS loss would have required a marked nose-up pitch, which would have been a strong cue. There were no other gliders in the immediate vicinity, or any other distractions.

There were at least 15 other transits through this area during the day, with nothing unusual reported. Nevertheless, some sudden gust, curl-over, thermal interference, or rotor could be postulated.

3. Conclusions

The pilot was current and familiar with the Southdowns ridge.

The flight had proceeded without incident for 2:45hr, being flown conservatively for the conditions.

An unexplained upset as the glider was flying above a bowl caused a stall which was not recoverable in the height available. The pilot is sure this was not a spin.

4. Safety

Recommendations

Consider carriage of

PLBs

Reinforce awareness of ridge hazards: thermal interference, curl-over.

G Stilgoe

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