

No: 1/93

Ref: EW/G92/11/05

Category: 1c

Aircraft Type and Registration: Cessna 152, G-BSHE

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

Year of Manufacture: 1978

Date & Time (UTC): 6 November 1992 at 1729 hrs

Location: Shoreham, West Sussex

Type of Flight: Aerial Work (training)

Persons on Board: Crew - 2 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Extensive substantial damage

Commander's Licence: Commercial Pilot's Licence with Instructor rating

Commander's Age: 40 years

Commander's Flying Experience: 2,970 hours (of which 849 were on type)
Last 90 days - 110 hours
Last 28 days - 51 hours

Information Source: Aircraft Accident Report Form submitted by the pilot,
and further enquiries by the AAIB

The aircraft was on the second flight of a night rating training course. The pilot under training, who was occupying the left hand seat, held a Private Pilot's Licence and had a total of 111 hours flying experience, 44 of which were on type. He had some 5 hours instrument flying experience, which had been gained some 18 months previously. A local area night familiarisation flight had been undertaken in the Cessna 152 two nights prior to the accident, but the student's previous experience on type was some 18 months earlier. The student also had not previously operated the aircraft in the circuit at night. The student was the handling pilot throughout the accident flight, being talked around the circuit pattern by the instructor.

The commander, who was the Chief Flying Instructor of the flying training organisation, was operating his fifth training sortie of the day. He had noted that occasionally during the day, patches of low stratus cloud had formed and dissipated in the vicinity of the airport.

As G-BSHE was taxiing out for departure, another aircraft was inbound to land at Shoreham from the east. The ATCO had informed G-BSHE that the visibility from the Control Room was not very good.

Some discussion with the other aircraft had taken place about a layer of thin stratus cloud over the high ground to the north-east of Shoreham, but its presence was not communicated directly to G-BSHE.

G-BSHE took off at 1724 hrs from Runway 21 and entered a left hand circuit pattern at 1,100 feet, which is standard for this Runway. The commander noted that there was good visual reference with the aerodrome on the crosswind and downwind legs. Another Cessna aircraft had joined the circuit pattern from the west while G-BSHE was climbing out, and was cleared number one to final approach. G-BSHE therefore extended the downwind leg somewhat further than usual to accommodate the traffic, such that it was outside the Aerodrome Traffic Zone. On base leg, the student reduced power, selected 20° Flap, and commenced descent. The aircraft entered a thin layer of stratus cloud at approximately 800 feet. This cloud had not previously been noticed by either pilot.

The commander reminded the student that he should not descend further without reference to the PAPI Approach Path Indicators for Runway 21. Two further prompts were made by the commander about height and heading, before power was increased to put the aircraft into a climb. This application came too late to prevent the aircraft making contact with the ground at an elevation of some 500 feet above mean sea level. The aircraft impacted initially on its left wingtip and left main landing gear, and came to rest on a north-westerly heading in about 40 metres. There was no fire, and the occupants, who were uninjured, vacated the aircraft rapidly by the normal means. Once the commander had assessed that there was no imminent danger of fire, he returned to the aircraft to use the RTF to indicate their position and to request assistance from Shoreham ATC. The locally based Police helicopter was despatched to the area, but could not locate the aircraft in the layer of hill fog. The pilots from the Cessna commenced walking down the hillside, and were picked up around 90 minutes later.

The Shoreham weather report recorded at 1730 UTC indicated that the surface wind was 240°/8 kt, visibility 3,000 metres in mist, 5 oktas of stratus cloud with a base estimated to be 700 feet, temperature 12°C, dew point 11°C. This was in agreement with the Meteorological Office aftercast, which indicated that there was an anticyclone over the area, producing a moist southwesterly airstream.

The high ground of the South Downs reaches an elevation of 711 feet amsl to the north-east of Shoreham Airport. The sector safety altitude in this quadrant is 2,100 feet amsl, and the visual circling minima from an instrument approach is 1,110 feet amsl. The student commented that no discussion had taken place regarding safety altitudes prior to the circuit detail.