

AAIB Bulletin No: 9/94

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Category: 1.3

Aircraft Type and Registration: Cessna 152, G-BILR

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

Year of Manufacture: 1980

Date & Time (UTC): 11 July 1994 at 1445 hrs

Location: Near Cusop Dingle, Hay-on-Wye, Hereford

Type of Flight: Aerial Work

Persons on Board: Crew - 2 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Left tailplane and elevator bent, minor dent under fuselage, and right-hand spat cracked

Commander's Licence: Commercial Pilot's Licence with Instrument Rating

Commander's Age: 35 years

Commander's Flying Experience: 406 hours (of which 160 were on type)
Last 90 days - 137 hours
Last 28 days - 60 hours

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

The aircraft took off from Welshpool at 1125 hrs on an aerial photographic flight; on board were the pilot and a photographer. After photographing properties in the Ludlow area the crew decided, because of the favourable conditions, to use up the remaining film in the Hay-on-Wye area before refuelling at Shobdon. The visibility was excellent, there was no significant cloud, and the forecast wind at 1,000 feet agl was 210°/10 kt; the reported surface wind at Shobdon, 15 nm away, was light and variable. The pilot established the aircraft on a southeasterly heading at 65 kt, above a valley running south east from Cusop; the aircraft was level with the top of the valley sides which were approximately 700 feet amsl. The pilot reported that he was holding the aircraft in a slight climb to maintain separation from buildings in the valley. About halfway down the valley, the air suddenly became turbulent and the aircraft began to lose height. The pilot applied power and raised the nose of the aircraft; this had little effect and, as the aircraft was now below the valley tops and the pilot was not confident of being able to clear the hills, he selected full power and attempted to turn through 180° to the left. This turn brought the aircraft close to some trees at the side of the valley, and the pilot

increased his rate of turn. At this point he encountered further turbulence and the aircraft stalled. The pilot took immediate recovery action and regained control, but was unable to prevent G-BILR from hitting the tops of several trees. As he recovered the aircraft on a northwesterly heading he noticed that the left tailplane was bent and buckled. After transmitting a 'PAN' call, the pilot recovered G-BILR to Shobdon without further incident.

Subsequently, the pilot stated that he had not anticipated the effect of the local terrain on a stronger than forecast local wind; to the south west of his track at approximately 3 nm the ground rises to higher than 2,200 feet amsl.