

## Cessna 152, G-BTGW

<b>AAIB Bulletin No:</b>	<b>Ref: EW/G2001/11/08</b>	<b>Category: 1.3</b>
<b>Aircraft Type and Registration:</b>	Cessna 152, G-BTGW	
<b>No &amp; Type of Engines:</b>	1 Lycoming O-235-L2C piston engine	
<b>Year of Manufacture:</b>	1979	
<b>Date &amp; Time (UTC):</b>	12 November 2001 at 1537 hrs	
<b>Location:</b>	Detling Show Ground (near Detling VOR)	
<b>Type of Flight:</b>	Training	
<b>Persons on Board:</b>	Crew - 2	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Substantial	
<b>Commander's Licence:</b>	UK Airline Transport Pilots Licence with Assistant Flying Instructor Rating	
<b>Commander's Age:</b>	35 years	
<b>Commander's Flying Experience:</b>	6,200 hours (of which 103 were on type)  Last 90 days - 150 hours  Last 28 days - 45 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and enquiries by the AAIB	

Under the supervision of the Chief Flying Instructor (CFI), the Instructor and his student had planned and briefed for a navigation exercise. In accordance with the JAR-FCL PPL syllabus, this was to include navigation at less than 1,000 feet agl. The weather forecast for the area was obtained from the 0900 hrs UTC MET Form 215. This indicated a visibility of 8 km and scattered to broken stratus between 1,000 feet and 1,500 feet amsl. As the Instructor could exercise the privileges of an IMC Rating on the basis of his current UK Airline Licence Proficiency Check (LPC), he had agreed with the CFI that he would climb to IFR, for recovery to Stapleford Airfield, if he could not complete the exercise.

The first leg was flown by the student and was uneventful culminating in a landing at Lydd Airfield. However, shortly after the subsequent departure for Shoreham Airport on the second leg the Instructor became concerned with the lowering cloud base and turned towards the coast. He informed 'London Information' of the change of route and asked for the latest Shoreham weather. This was suitable and the Instructor continued to Shoreham for a landing.

At Shoreham, in preparation for the final leg back to Stapleford, the Instructor contacted Stapleford to check the weather and was advised that it was broken at 800 feet agl. He then refuelled the aircraft and decided to depart from Shoreham and proceed VFR along the coast towards Hastings, rather than on his original planned route initially towards Bewl Water. During this leg, the Instructor took control of the aircraft and asked the student to prepare a simulated diversion from Fairlight Cove, near Hastings, to a point north of Chatham. Once this plan was completed and checked, the Instructor advised 'London Information' of the intended route. He was flying clear of cloud, at approximately 600 feet agl, and was instructing the student on the difficulties associated with low level navigation; he emphasised the importance of maintaining height above 500 feet agl to comply with Rule 5 of the ANO. The Instructor intended to maintain VFR as long as possible but if the conditions became unsuitable, he would climb and proceed under IFR. On this northerly leg, the student took control for a short time before the Instructor re-assumed control in a position to the north west of Lashenden (Headcorn) Aerodrome. He turned towards the east to avoid Maidstone and then turned back north-west towards Detling VOR using visual references. As the Instructor was pointing out the value of the M20 motorway as a feature, he was suddenly aware that he had flown into hill fog. He applied full power and reverted to instruments for a climb but then felt a loud 'thud'. He was aware of a reduction in engine power and saw the branches of a tree below the aircraft. The pitch control also felt 'unusual' but the hill fog cleared and the Instructor saw a large field nearby. He transmitted a 'Mayday' call to 'London', which was acknowledged, and then made a forced landing into the field using limited power. Touchdown was smooth but the aircraft did not stop before contacting a perimeter fence at approximately 5 kt. After making all the switches safe, the two occupants vacated the aircraft.

The aircraft was initially assessed at the crash site and then dismantled before being taken by road back to Stapleford Airfield. The initial main impact with the tree appeared to have been on the main landing gear but foliage was also found around the engine cowling. The Instructor subsequently stated that he had been flying at about 650 feet amsl, based on the current QNH of 1014 hPa, when the aircraft hit the tree. The highest ground in the immediate area was 673 feet amsl but there was also an aerial, 935 feet amsl, located nearby.

The Instructor acknowledged that he had become overloaded and distracted whilst trying to provide instruction in addition to flying and navigating. While the hill fog was not specifically forecast, the weather was unsuitable for the flight and the Instructor considered that he had made an error in judgement in not abandoning the exercise well before the accident.