

Cessna A152, G-BHAD

AAIB Bulletin No: 11/97 Ref: EW/G97/08/26 Category: 1.3

Aircraft Type and Registration:	Cessna A152, G-BHAD
No & Type of Engines:	1 Lycoming O-235-L2C piston engine
Year of Manufacture:	1978
Date & Time (UTC):	28 August 1997 at 1110 hrs
Location:	Bettisfield Park, Whitchurch, Shropshire
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - 1
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Damage to propeller and spinner
Commander's Licence:	Private Pilot's Licence
Commander's Age:	73 years
Commander's Flying Experience:	105 hours (all on type) Last 90 days - 5 hours Last 28 days - 3 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

The aircraft had been airborne for about 40 minutes on a local flight from Sleaf Airfield and was in the process of returning to the airfield. The engine began to misfire and lost power so the pilot issued a MAYDAY call to Shawbury ATC while attempting to return to the airfield. Having descended to about 400 feet AGL, an into-wind grass field was selected and a successful forced landing was made. Minor damage was sustained when it travelled through two barbed wire fences during the ground roll. Subsequent inspection indicated that the aircraft had run out of fuel.

Analysis of the refuelling records at the airfield and the aircraft's flight log sheet indicated that the previous refuelling, to full tanks, had taken place on 23 August at about 1435 hrs. The aircraft had then flown two flights, for a total of 1 hour 15 minutes block time (55 minutes airborne) during the remainder of that day. Contrary to the normal club practice, no refuelling took place at the end of the day's flying. The next flights recorded were on 25 August, during which three flights were operated for a total of 2 hours 35 minutes block time (2 hours 5 minutes airborne). Again, no

refuelling took place at the end of that day. Thus, on the day of the accident, the aircraft had already operated for 3 hours 50 minutes block time (3 hours airborne) prior to the departure on the accident flight.

The aircraft had been hangared overnight prior to the flight. A club flying instructor, who had conducted the latest flight on 25 August, had left a note on the aircraft flying log sheet indicating that the aircraft had not been refuelled after that day's flying and 2 hours 35 minutes had been flown from full tanks. However, the 1 hour 15 minutes that had been flown on 23 August had not been included in this figure.

The note was observed by the pilot involved in the accident prior to his departure. The fuel gauges were inspected as part of the pre-flight preparations (indicating one quarter and 'just above empty' in the two tanks). The pilot considered that this was sufficient for his purposes, but he did not carry out a visual inspection of the fuel tank contents. Visual inspection of the fuel contents on this type of aircraft normally requires the use of steps, either external or those attached to the wing strut and fuselage side.

It was the normal practice at the flying club to refuel the aircraft at the end of each day's flying. However, it was not uncommon for aircraft operations to continue until after the refuelling facility had closed for the day. Additionally, no record of refuellings was kept with the aircraft flight log sheets. Thus, there was no method of cross-checking the expected fuel contents with the actual tank contents observed during any pre-flight visual inspection. It was not the club policy to provide 'dip sticks' for the accurate assessment of fuel tank contents.