

Beagle B121 Pup Series 2, G-AXJH

AAIB Bulletin No: 5/2003

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Category: 1.3

INCIDENT

Aircraft Type and Registration:	Beagle B121 Pup Series 2, G-AXJH	
No & Type of Engines:	1 Lycoming O-320-A2B piston engine	
Year of Manufacture:	1969	
Date & Time (UTC):	9 November 2002 at 1222 hrs	
Location:	Near Compton VOR, Berkshire	
Type of Flight:	Private (Training)	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	None	
Commander's Licence:	Commercial Pilot's Licence with Instructor Rating	
Commander's Age:	49 years	
Commander's Flying Experience:	1,948 hours (of which 5 were on type)	
	Last 90 days - 51 hours	
	Last 28 days - 5 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Under the supervision of a flying instructor, the student was carrying out refresher instrument flying training, which included a practice instrument descent towards the VOR navigation beacon at Compton. The aircraft had descended from 2,500 feet to about 1,430 feet at a rate of about 400 feet per minute. The student then attempted to apply full power to climb away, but the engine stopped.

During the attempted restart checks, the handling pilot confirmed that the carburettor heat and the fuel pump were both selected 'On'. The carburettor heat had been selected shortly after the descent commenced, after the throttle had already been closed.

A distress call was made and full landing checks had already been carried out in anticipation of the commencement of the practice approach. The aircraft made a successful forced landing in a field approximately 1 nm from the VOR.

The instructor commented that carburettor icing had been detected earlier during the flight and had been successfully dealt with at that time.

Subsequent engineering inspection found no defects with the engine that could have caused the loss of power on this occasion.

The CAA General Aviation Safety Sense leaflet number 14A, entitled *Piston Engine Icing*, contains comprehensive information on the detection and handling of carburettor icing. It includes the advice that:

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'Carb icing is much more likely at reduced power, so select hot air before, rather than after, power is reduced for the descent, and especially for a practice forced landing or a helicopter autorotation, i.e. before the exhaust starts to cool. (This also allows a check that no ice is present and that the carb heat is still working.) Maintain FULL heat during long periods of flight with reduced power settings. At intervals of about every 500 feet or more frequently if conditions require, increase power to cruise setting to warm the engine and to provide sufficient heat to melt any ice.'