Safety Regulation Group
Safety Investigation and Data Department

Follow-up Action on Occurrence Report

ACCIDENT TO CESSNA C152, G-MASS, AT CHENIES, BUCKS ON 28 SEPTEMBER 2002
(AIRCRAFT FORCE LANDED AFTER ENGINE STOPPED IN FLIGHT)

CAA FACTOR NUMBER	:	F15/2004
FACTOR PUBLICATION DATE	:	15 April 2004
OPERATOR	:	Club / Group
CAA OCCURRENCE NUMBER	:	2002/06994
AAIB REPORT	:	Bulletin 3/2004

SYNOPSIS

(From AAIB Report)

The commander of the aircraft, a flying instructor, reported that he departed from Denham, with the student pilot handling, on a dual training flight. The aircraft climbed initially to 1,000 feet on the Denham QNH before initiating a further climb at Chalfont St Giles (approximately 5 nm from Denham), levelling at 1,900 feet over Amersham, (some 8 nm NNW of Denham). The aircraft was turned right towards Maple Cross and Denham Information/Radio was called for rejoin information.

The Instructor stated that carburettor air was selected hot and power reduced from 2,100 RPM to 1,800 RPM to commence a descent towards Maple Cross. A FREDA check was then carried out and all engine indications appeared to be normal. The Denham QFE was set and at a point some 5 nm north of Denham, the instructor remarked to the student that the aircraft was slightly high. The student therefore reduced power to approximately 1,700 RPM. Shortly afterwards the engine lost power, its speed decreasing to about 1,000 - 1,100 RPM.

The student opened the throttle but obtained no response from the engine. The instructor then operated the throttle with little effect; the engine spluttered and its speed increased by 50 - 100 RPM. The instructor therefore took over control and turned the aircraft away from a built-up area. He tried the effect of various throttle settings with the carburettor air control in both the hot and cold positions but was unable to obtain any increase in engine power and subsequently transmitted a distress call. He then selected a field, established the aircraft on a right hand base leg and desisted from making further attempts to obtain power from the engine. He selected 20 degrees of flap on the base leg and made a right hand turn onto a final approach, before selecting full flap.

The instructor noticed a low fence, half way along the field, which he was able to fly over. He stated that crash drills were carried out; however, he did not consider, or have time, to switch off the fuel or the battery master switch. Seat belts were tightened and both doors opened. A normal touch-down was made with the stall warner sounding and the Instructor brought the aircraft to a halt despite the downslope of the chosen field. The engine was then found to be operating at idle power so the instructor shut it down and the aircraft was vacated.

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FOLLOW UP ACTION

The one Safety Recommendation, made by the AAIB following their investigation, is reproduced overleaf, together with the CAA's response.

Recommendation 2004-11

The Civil Aviation Authority should consider the safety implications of Rule 5 with respect to its effect on realistic training for engine failure after takeoff and en route engine power loss on single engined aircraft and publish a paper on the subject, for the information of Flight Instructors, making clear the Authority's philosophy and promulgating what they believe to be acceptable best practice.

CAA Response

The CAA partially accepts this Recommendation. The CAA has recently reviewed Rule 5 in its entirety and takes the view that, practice of Engine Failure After Take-Off (EFATO) in single engine aeroplanes can be conducted effectively and realistically without infringement of Rule 5.

The CAA has taken steps to ensure that guidance on this topic is included in the seminars required for revalidation of Flight Instructor (FI(A)) ratings and Flight Instructor Examiner (FIE(A)) authorisations with immediate effect. Further guidance will be promulgated to all holders of a current FI(A) rating through the CAA's routine advisory document (TrainingCom).

CAA Status - Closed