ACCIDENT

Aircraft Type and Registration: Scottish Aviation Bulldog 120 Model 121, G-CBBC

No & Type of Engines: 1 Lycoming IO-360-A1B6 piston engine

Year of Manufacture: 1973

Date & Time (UTC): 4 July 2008 at 1022 hrs

Location: 3 nm north of Basingstoke, Hampshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Canopy broken and fire extinguisher lost

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 61 years

Commander's Flying Experience: 4,828 hours (of which 239 were on type)

Last 90 days - 20 hours Last 28 days - 8 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

Synopsis

The aircraft's portable fire extinguisher detached during aerobatic flight and broke through the Perspex canopy. There were no injuries reported and the aircraft landed safely.

Description of the accident

The pilot reported that he carried out pre-flight checks in accordance with the Flight Reference Cards, which included a check of the security of the hand-held fire extinguisher in the rear luggage area. Other equipment and loose articles were removed from the aircraft prior to takeoff from Blackbushe Airport for an aerobatics flight.

The pre-aerobatics checks were carried out, during which the pilot reached behind his seat to confirm that the fire extinguisher was secured in place. The pilot then flew a series of aerobatic manoeuvres, commencing at 3,000 ft. He carried out a loop, a stall turn and two slow rolls without incident. During a third slow roll, when the aircraft was inverted with about minus 1.5 g applied, the fire extinguisher came free and broke through the top of the canopy. The aircraft returned to Blackbushe for an uneventful landing, and the incident was reported to the authorities. There were no reports of injuries on the ground or damage to property.

The extinguisher had been secured in a bracket which was itself secured to the top of the control tunnel which ran centrally through the rear baggage area, so that it was accessible to the pilot or passenger. The

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extinguisher was secured in the bracket by a commonly used type of quick-release sprung latch. The latch appeared serviceable when inspected after the flight.

The pilot had removed a large box of servicing sundries prior to the flight, and considered it possible that the latch had become dislodged in the process, such that it opened under application of sufficient negative g.

Comment

This accident highlights the importance of checking that cockpit equipment is properly secured prior to flight, which is a critical check if aerobatic manoeuvres are planned. Further guidance on this and other aspects of aerobatics in general aviation aircraft is given in the CAA's General Aviation Safety Sense leaflet Number 19, 'Aerobatics'.

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