

Piper PA-28-151 (Modified), G-BOYH

AAIB Bulletin No: 7/2002 **Ref:** EW/G2002/04/22 **Category:** 1.3

INCIDENT

Aircraft Type and Registration: Piper PA-28-151 (Modified), G-BOYH

No & Type of Engines: 1 Lycoming O-320-D3G piston engine

Year of Manufacture: 1977

Date & Time (UTC): 17 April 2002 at 1229 hrs

Location: Thruxton Airfield, Hants

Type of Flight: Training

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Fire damage to engine and cowling

Commander's Licence: Student Pilot

Commander's Age: 41 years

Commander's Flying Experience: 64 hours (all on type)

Last 90 days - 15 hours

Last 28 days - 6 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and AAIB enquiries

The student pilot was undertaking a solo cross-country flight. He had taken off from White Waltham airfield and had performed an uneventful cross-wind landing at Thruxton. While rolling out after landing, and with the power set to idle, the engine stopped. At this point the aircraft was still on the runway, and the pilot called ATC advising them of his situation. The tower responded by advising him to restart the engine and continue to taxi. He then attempted to restart the engine and during the second or third attempt he noticed wisps of smoke and the smell of burning. He

advised the tower that he had a fire, turned off the fuel and battery master switch and vacated the aircraft. Smoke and flames were by then emanating from the front of the aircraft. The fire services arrived soon afterwards and extinguished the fire.

The instructor debriefed the student pilot and noted that, in his view, that it was possible the student had attempted to restart the engine while the electric fuel pump was running, since the after-landing checks had probably not been completed by the time the engine stopped. Furthermore the mixture would also have been set to fully rich. With the engine hot, this could have resulted in an over-primed condition. There have been previous cases of PA 28 engine fires during starting caused by over-priming.

The reason for the engine stoppage after landing could not be determined. No obvious mechanical failure had occurred, and the fuel system was too damaged by fire to allow meaningful conclusions to be drawn. However the instructor stated that a few weeks earlier the same aircraft had experienced another engine stoppage, also after landing. At the time, no fault was found. The instructor considered this particular aircraft to be somewhat prone to this problem. No indication existed as to whether this was associated with carburettor ice, although such icing, if relevant, would suggest that the stoppage itself would have been associated with an over-rich condition.