

No: 9/91

Ref: EW/G91/04/02

Category: 1c

Aircraft Type and Registration: Piper PA-28-161, G-BPOM

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

Year of Manufacture: 1984

Date & Time (UTC): 11 April 1991 at 1635 hrs

Location: Kidderminster, Worcestershire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - Minor Passengers - N/A

Nature of Damage: Damage to propeller, cowling, engine mounts and wingtips

Commander's Licence: Private Pilot's Licence

Commander's Age: 28 years

Commander's Flying Experience: 2,293 hours

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

The aircraft was engaged on a private pleasure flight having taken-off from Staverton airport and was loitering in the Kidderminster area. After about half an hour of flight, the pilot reports that he routinely changed the fuel supply from the left to the right tank and, after a few minutes of operation on this tank the engine started to run roughly then stopped completely.

He selected full carburettor heat, checked the fuel pump ON, changed the fuel selection back to the left tank and commenced the engine failure drill. The engine did not respond to the restart attempts so the pilot selected a suitable field for a forced landing. Unfortunately, the field chosen had recently been ploughed and scuffed ready for seeding and the soft surface caused the nose landing gear to collapse, standing the aircraft on its nose and wingtip. Despite wearing the diagonal restraint, the pilot hit his head on the coaming and wrenched his back. However, he managed to evacuate the aircraft without further injury.

The pilot initially associated the engine failure with the change of fuel tank and, whilst inspecting the tank contents (which were both adequate) he believed that the fuel in the right tank had an abnormal

smell and had signs of a white deposit. Subsequent examination did not, however, confirm this suspicion and the fuel in both tanks was apparently normal with no evidence of solid or liquid contamination. It was also noted that the aircraft had flown several times since the last refuelling and that the pre accident take-off power checks had been performed on the right tank. The engine itself was subsequently ground-run with no indications of abnormalities which could have led to its failure. The maintenance organisation which recovered the aircraft reported that the lower spark plugs were later found to be wet with water which, in their opinion and experience, is commonly the result of melted ice deposits from the induction system.

A meteorological aftercast for the Kidderminster area at the time of the accident indicated that the weather conditions below 5000 ft were conducive to serious induction icing at any power setting.