

No: 10/91

Ref: EW/G91/08/06

Category: 1c

Aircraft Type and Registration: Piper PA-32-300 Cherokee Six, G-BATM

No & Type of Engines: 1 Lycoming IO-540-K1A5 piston engine

Year of Manufacture: 1972

Date & Time (UTC): 5 August 1991 at 1333 hrs

Location: Near Biggin Hill Airport, Kent

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Serious damage to the left wing,
propeller and landing gear

Commander's Licence: Private Pilot's Licence

Commander's Age: 44 years

Commander's Flying Experience: 2,800 hours (of which 5 were on type)

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

The aircraft had departed on a flight from Newmarket racecourse to Shoreham with a reported 40 gallons of fuel on board. When just south of the river Thames and approaching the Biggin Hill area, the engine started to run roughly. The pilot stated that initially there was no unusual engine vibration, just a different engine note coupled with a slight loss of power. After calling Thames Radar to advise them of the problem, the pilot requested a direct track to Biggin Hill. This was duly passed to him but the pilot elected to fly south of this track in order to avoid a built-up area ahead. The pilot carried out all the normal engine checks, but to no avail, by which time he estimated that the engine was producing 40% power, or less. The aircraft had descended to a height of approximately 800 ft agl when Thames radar requested a height check. The pilot reported his height as 450 ft, advised that the aircraft could not reach Biggin Hill and that a forced landing would have to be made. At this moment the engine failed completely, but continued to windmill. In order to avoid making an approach to the chosen field over a built-up area, the pilot elected to land downwind (the wind was estimated at 210°/12 kts), which necessitated passing over some tall trees, at the edge of the field, in a left hand turn. Shortly before touchdown with the wings rolled level, and with full flap applied, a high rate of descent developed. This resulted in the left wing striking the field surface, which sloped up to the left of the aircraft's

track, causing this wing to detach from the fuselage as the aircraft yawed to its left. The aircraft came to a halt after a ground-slide of approximately 80 ft. The pilot was uninjured and vacated the aircraft after turning off the electrics and fuel.

After the aircraft had been recovered, the engine and its fuel injection system were examined by the operator/repair agency. They reported that the fuel system was full of fuel and that no obvious defects were apparent on the engine. Their investigation of the engine and airframe systems is continuing and will be reported upon in a future edition of the AAIB Bulletin should any defects be revealed.

Commander's Licence:	Private Pilot's Licence
Commander's Age:	44 years
Commander's Flying Experience:	2,800 hours (of which 2 were on type)
Information Source:	AAIB Accident Report Form submitted by the pilot and AAIB enquiries
Nature of Damage:	Serious damage to the left wing, propeller and landing gear
Injuries:	Crew: None Passengers: Nil
Persons on Board:	Crew: 1 Passengers: None
Type of Flight:	Private

The aircraft had departed on a flight from Newmarket enroute to Shrotonham with a reported 40 gals of fuel on board. When just south of the river Thames and approaching the Biggin Hill area, the engine started to run roughly. The pilot stated that initially there was no unusual engine vibration, but within an engine note coupled with a slight loss of power. After calling Thames Radar to advise that the engine problem had occurred, the pilot requested a direct track to Biggin Hill. This was duly passed to him but the pilot elected to fly south of his track in order to avoid a built-up area ahead. The pilot carried out the normal engine checks, but to no avail, by which time he estimated that the engine was producing 70% power or less. The aircraft had descended to a height of approximately 800 ft a/gl when Thames Radar advised the pilot to climb to 1,000 ft. The pilot reported his height as 850 ft, advised that the aircraft could not climb further and that a forced landing would have to be made. At this moment the engine failed, the aircraft pitched into a steep climb and then a forced landing was made. At the moment the engine failed, the aircraft was flying at a speed of 120 kts. In order to avoid making an approach to the chosen field, the pilot elected to land downwind (the wind was estimated at 210°/12 kts), which was a hard-up area. The aircraft was passing over some tall trees at the edge of the field, in a left hand turn. Shortly before the aircraft struck the ground, the wings rolled level and with full flap applied, a high rate of descent developed. The aircraft struck the ground in the left wing striking the field corner, which sloped up to the left of the aircraft's