

Piper PA-38-112, G-BGRR

AAIB Bulletin No: 2/98 Ref: EW/G97/08/20 Category: 1.3

Aircraft Type and Registration:	Piper PA-38-112, G-BGRR
No & Type of Engines:	1 Lycoming O-235-L2C piston engine
Year of Manufacture:	1978
Date & Time (UTC):	22 August 1997 at 1835 hrs
Location:	Woodford Airport, Greater Manchester
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - 1
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Destroyed
Commander's Licence:	Private Pilot's Licence
Commander's Age:	38 years
Commander's Flying Experience:	154 hours (of which 8 hours were on type) Last 90 days - Not known Last 28 days - Not known
Information Source:	AAIB enquiries

The pilot did not respond to the AAIB requests to complete an Air Accident Report Form but a copy of his report to the aircraft's operator was obtained, from which part of the following was derived.

The pilot successfully completed the ground checks of the aircraft prior to collecting his passenger. Having boarded the aircraft with his passenger, the pilot carried out the cockpit and pre-start checks before starting the engine. Following an 'easy start' he then completed the after-start checks and requested taxi clearance from ATC, which cleared the pilot to taxi to holding point A for Runway 25 (see Figure 1). Upon arrival at the holding point engine power and pre-departure checks were successfully completed. He was then cleared by ATC to enter and backtrack on Runway 25. Another aircraft, which was ahead of G-BGRR, was also in the process of backtracking to the end of Runway 25. This pilot was subsequently given his departure clearance and was requested by ATC to commence his take-off roll from the road junction (indicated on Figure 1). The pilot agreed and was given clearance to takeoff.

After lining up, the pilot applied full power and the static RPM was seen to build up correctly and the oil temperature and pressure were both registering in the green sectors of their gauges. At about 55 kt, with no flap selected, the pilot rotated the aircraft and once airborne established a positive rate of climb. However, when between 80 to 100 feet agl the engine 'coughed'; the pilot closed the throttle and then re-applied full power, but he did not think that full power was obtained since the aircraft was losing height. The pilot therefore informed ATC that he had a problem and was going to land ahead.

As he landed and applied the brakes he selected all switches to the off position, with the exception of the master switch, and turned the fuel off. Unfortunately he could not stop the aircraft before the end of the runway and as the nose wheel ran off the tarmac onto the grass it collapsed. The propeller struck the ground and the aircraft came to a complete stop. The pilot turned the master switch off and both occupants evacuated the aircraft without injury.

Subsequent examination of the aircraft by a member of the operator's engineering staff failed to find any explanation for the power failure. The fuel system was checked and no evidence of water contamination was found. A weather aftercast was obtained and when plotted on the carburettor icing probability chart gave a prediction of moderate icing at cruise power and serious icing at descent power. The surface wind was 330° at 8 kt.

It is understood that at the time of the accident a BAe 146 aircraft was carrying out full power engine runs on all four engines. The aircraft was parked on the north-western dispersal area with the rear of the aircraft pointing towards the middle of the runway (see Figure 1). It has been suggested that the accident aircraft may have been affected by the efflux from the engines of the BAe 146.