

No: 12/90

Ref: EW/G90/08/26

Category: 1c

Aircraft Type and Registration: Piper PA-28-181, G-BRME

No & Type of Engines: 1 Lycoming O-360-A4M piston engine

Year of Manufacture: 1977

Date and Time (UTC): 27 August 1990 at 1950 hrs

Location: Near Portaferry, Northern Ireland

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Minor damage to both mainplanes

Commander's Licence: Commercial Pilot's Licence and Airline Transport Pilot's Licence (H)

Commander's Age: 32 years

Commander's Total Flying Experience: 250 hours fixed wing (of which 30 were on type) and 1,865 hours rotary wing

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft departed Liverpool at 1845 hrs on the last sector of a flight to Belfast, Aldergrove Airport. The Airfield Approach Checklist was completed shortly before the descent and the pilot noted that there were 15 US gall in the right wing tank and 10 US gall in the left; the fuel selector was to the right tank.

Descent, from a cruising altitude of 2000 feet, was initiated as the coast was crossed north of Portaferry. The pilot reported that he believed that the carburetor heat control had been selected to HOT throughout the descent. As the aircraft passed 1000 feet it was selected to COLD and power was applied to arrest the rate of descent. The rpm increased slightly but the engine failed to respond to further throttle movement and subsequently stopped. The magneto switch was confirmed on BOTH, the fuel pump was selected on, the mixture lever was set fully forward and the fuel selector was changed to the left tank. Again the engine failed to respond, even when the carburetor heat control was subsequently selected to HOT.

By 700 feet a field had been selected for the forced landing and a brief distress message had been transmitted. The detail of the selected landing area was not discernible at this time and it was not until the later stage that the pilot became aware of a small hill in his approach path. The necessary detour around this caused the pilot to omit the pre-crash vital actions.

A landing was made, with no flap selected, on an up slope, into an estimated 10 kt head wind. The aircraft sustained minor damage as it went through a wire strand type boundary fence in the touchdown area, but the landing was otherwise uneventful. After he had completed the relevant vital actions, the pilot, who was wearing diagonal type upper torso restraint, escaped without injury.

Before the aircraft was moved from the site, a successful engine run was carried out by the maintenance organisation.

Information obtained from the Meteorological Office at Bracknell indicated that, over the period of the accident, the following height/temperature profile existed;

Height	Temp	Dew Point
2000 feet	13°C	10°C
1000 feet	15°C	12°C
Surface	17°C	16°C

These conditions would have been conducive to the formation of serious carburetor icing.