

No: 9/90 **Ref:** EW/G90/06/08 **Category:** 1c

Aircraft Type and Registration: Isaacs Fury, G-BKZM

No & Type of Engines: 1 Continental O-200-A piston engine

Year of Manufacture: 1989

Date and Time (UTC): 14 June 1990 at 1900 hrs

Location: Port Dinorwic, Gwynedd, Wales

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - 1 (minor) Passengers - N/A

Nature of Damage: Severe damage to undercarriage, fuselage and lower wings

Commander's Licence: Private Pilot's Licence

Commander's Age: 51 years

Commander's Total Flying Experience: 1,223 hours (of which 2 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot

Following a normal pre-flight inspection, the aircraft was taxied to the hold at runway 22 where a satisfactory engine power check was carried out. After an uneventful take-off, the aircraft was climbed to the southeast for a local flight. During this period the electric fuel pump was left on and the fuel pressure gauge indicated 3.5 psi. The other engine instruments were indicating normally but the contents indication for the two fuel tanks was erratic, as it had been on a previous flight. A short time later, whilst cruising at 60 kts and 2300 RPM, the pilot decided to check his magnetos, although the engine was running normally. The engine suddenly stopped without warning. During the ensuing descent towards the only available area suitable for landing, several attempts were made to restart the engine, but with no success. Following a 180 degree turn into wind the aircraft landed heavily, despite the application of full up elevator, damaging its undercarriage, lower wings, engine and fuselage. The pilot sustained minor injuries.

The fuel system comprised two fuselage mounted tanks, an upper and a lower, which supplied fuel through an electric pump to the carburettor. No mechanical engine driven fuel pump was fitted. However, subsequent examination of the aircraft by its owner and the pilot showed that fuel (100LL) was present in both tanks, the carburettor and gascolator. A check was reported to have been carried out on the ignition system. Initially, no sparks were observed at the plugs when the propeller was turned by hand with the magnetos switched ON. Removal of the left magneto earthing wire, however,

apparently caused sparks to be generated, as they were subsequently when the wire was reinstated. Although the magneto problem was not fully identified, they came to the conclusion that an intermittent fault in the magnetos circuit had probably caused the power failure.

As a result of this accident, the pilot made several marked observations about this aircraft type in relation to forced landings, including:

1. The stall speed (43 kts) and cruise speed (60 kts) of this relatively high drag aircraft are separated by only 17 kts and thus the pilot is required to take positive and immediate action following an engine failure, if a stall is to be avoided.
2. The instrument panel was not laid out in the accepted standard, resulting in loss of time whilst searching for the required information.
3. Two hands are required to attempt re-starting the engine, one to pull the starter cord, the other to depress the biased starter relay energising switch, necessitating release of the stick and throttle.