

No: 8/84

MICROLIGHT

Ref: EW/G84/07/14

Aircraft type and registration: Southdown Puma Sprint G-MMES (two seat flexible wing microlight powered by a Fuji Robin 440 2 stroke engine)

Year of manufacture: 1983

Date and time (GMT): 1 July 1984 at 1030 hrs

Location: Park Farm, Kineton

Type of flight: Private (pleasure)

Persons on board: Crew — 1 Passengers — 1

Injuries: Crew — Nil Passengers — Minor

Nature of damage: Airframe damaged, propeller damaged

Commander's Licence: PPL Group D, full Instructors Rating Group D

Commander's Age: 33 years

Commander's total flying experience: 282 hours on PPL (D) (of which 27 hours were on type) (Additional flying experience 4500 hours conventional glider)

Information Source: Accident Report pro-forma plus telecon with pilot plus telecon with Niklow Engineering (Agents for Robin Engines in the UK)

Shortly after take-off from a grass field approximately 350 yards long, when the aircraft was at about 90 feet agl, the engine failed. The upwind end of the field was bounded by an unoccupied house and power lines, beyond which there was a further field nominally designated as the overshoot field for the take-off strip. The engine failure occurred at a point when the aircraft was too high to land ahead on the remaining part of the take-off field, but was too low to attempt a landing in the overshoot field without risk of contacting the power lines. A further complicating factor was the presence of a helicopter parked in one corner of the overshoot field. The pilot made a descending turn to the left towards a small paddock lying beyond a group of three barns, but having made the turn realised that he would be unable to reach the paddock safely. The aircraft was landed on the roof of the largest of the three barns, which had a shallow pitch and was clad with a corrugated asbestos type material. The aircraft touched down at the near end of and ran forward along the roof, climbing up the slope towards the apex as it did so. As the aircraft reached the far end of the barn the nosewheel caught in the edge of the roof, tripping it up. As the aircraft fell to the ground, a distance estimated by the pilot to be approximately 60 feet, it completed a full forward somersault coming to rest the right way up in the concrete yard below. The wing struck a car parked in the yard as the aircraft hit the ground.

Following the accident the engine was dismantled. It was found that the top ring on one of the pistons had broken, allowing the normally pegged ring to rotate around the piston and become caught in the exhaust port, resulting in a segment of the outer piston crown, approximately 1½ inches around the circumference and 1¼ inches wide, breaking away from the piston. The engine had completed a total of approximately 30 flying hours from new.