CEA DR400/160, G-TUKE

AAIB Bulletin No: 7/2000 Ref: EW/G2000/05/06 Category: 1.3

Aircraft Type and Registration: CEA DR400/160, G-TUKE

No & Type of Engines: 1 Lycoming O-320-D2A piston engine

Year of Manufacture: 1981

Date & Time (UTC): 7 May 2000 at 1300 hrs

Location: Deanland Airfield, East Sussex

Type of Flight: Private

Persons on Board: Crew - 2 - Passengers - None

Injuries: Crew - None - Passengers - N/A

Nature of Damage: Aircraft destroyed

Commander's Licence: Private Pilot's Licence

Commander's Age: 56 years

Commander's Flying Experience: 230 hours (of which 160 were on type)

Last 90 days - 2 hours

Last 28 days - 1 hour

Information Source: Aircraft Accident Report Form submitted by the pilot

History of the flight

The surface of Runway 24 at Deanland Airfield is grass which was short. The surface wind was light, generally less than 5 kt from the northwest; the temperature was 21°C.

The pilot reported that the aircraft had landed on Runway 24 but that he had been advised to use Runway 06 for the subsequent take off. This take off was aborted when the aircraft failed to accelerate satisfactorily. The pilot decided to try Runway 24 but again the aircraft failed to accelerate satisfactorily and so he closed the throttle and applied the brakes. The aircraft overran the runway into a ploughed field. The occupants, who were both wearing lap and diagonal upper torso restraint, were uninjured and escaped before the aircraft was destroyed by fire.

Engineering background

The aircraft operator reported that an instructor who had flown the aircraft on 6 May 2000, reported that he felt an engine vibration in the range 2,100 to 2,300 RPM. It was found that one magneto was retarded by about 4°. The magneto was re-timed and the aircraft was test flown the following day. The engine performed normally and no vibration was experienced throughout the RPM range.

The pilot on the accident flight reported that the pre-flight magneto check was within normal limits and only minor vibration was experienced at cruise power.

Take off performance

The published length of Runway 24 is 457 m and although the slope is initially downhill the remainder of this length has a slight uphill slope; there is about 50 m of grassed area beyond this point. There may have been some soft patches on the runway following recent rain. The operator calculated that the basic take off run required in the prevailing wind and temperature was 323 m; no account was taken of runway slope or surface condition.