

**No: 5/88**

**Ref: 1c**

**Aircraft Type and Registration:** Reims Cessna F172M Skyhawk, G-BFLO

**No & Type of Engines:** 1 Lycoming O-320-E2D piston engine

**Year of Manufacture:** 1974

**Date and Time (UTC):** 20 March 1988 at 1530 hrs

**Location:** Sherburn-in-Elmet Aerodrome, Leeds

**Type of Flight:** Private (pleasure)

**Persons on Board:** Crew -1                      Passengers -3

**Injuries:** Crew -1 (minor)              Passengers -3 (minor)

**Nature of Damage:** Substantial to landing gear, wings, fuselage and fin

**Commander's Licence:** Private Pilot's Licence

**Commander's Age:** 33 years

**Commander's Total Flying Experience:** 79 hours (of which 14 were on type)

**Information Source:** Aircraft Accident Report form submitted by the pilot and telephone call to the pilot

The weather on the day of the accident was fine with a light and variable surface wind. The surface of the runway was reported as being soft with long grass. The take-off run available is published as 458 metres although the runway length is 553 metres. G-BFLO was lined-up for take-off at the start of the available runway for a short field take-off using 10 degrees of flap. Acceleration during the take-off run was poor and the airspeed appeared to stabilise at about 45 kt, some 5 kt below the planned lift-off speed. No attempt was made to lift-off. When about three quarters of the way down the runway, the pilot elected to abandon the take-off but failed to stop the aircraft in the remaining distance available and over-ran into a ploughed field where the aircraft nosed over onto its back. All four occupants evacuated the aircraft through the right hand door. All harnesses functioned correctly and the occupants suffered only minor injuries. There was no fire.

Calculations subsequent to the accident indicate that, using the advice given in Aeronautical Information Circular 52/1985, a take-off run in excess of 500 metres would have been required in the prevailing conditions.