No: 4/85 Ref: EW/G85/03/02

Aircraft type and registration: Cessna F177 RG G-AZFP (light single engined fixed wing aircraft)

Year of Manufacture: 1971

Date and time (GMT): 16 March 1985 at 1048 hrs

Location: Bournemouth (Hurn) Airport

Type of flight: Private (pleasure)

Persons on board: Crew -1 Passengers -1

Injuries: Crew — None Passengers — None

Nature of damage: Damage to nose undercarriage, propeller and fuselage.

Commander's Licence: Private Pilot's Licence with IMC and night ratings

Commander's Age: 41 years

Commander's total flying

experience: 157 hours (of which 75 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot and MOR.

The pilot was practising circuits on runway 35 at Bournemouth (Hurn) Airport. Two circuits were performed normally and the pilot was not retracting the undercarriage between the landings, leaving it locked down with three green indicator lights showing.

On the third landing, which was also normal, as the pilot allowed the nose-wheel to contact the runway at a speed of about 50 kt, the nose continued to drop and the propeller struck the ground, followed by the engine cowling. On evacuating the aircraft it was found that the nose undercarriage had collapsed.

Subsequent inspection has indicated that the nose undercarriage was not locked down and this has been attributed to two factors. Firstly, the retraction/extension jack had an internal leak such that it would not maintain hydraulic pressure on the 'down' side of the piston. Secondly, a lump of mud had apparently wedged itself in the downlock mechanism and was preventing the downlock from completely travelling overcentre. Slight maladjustment of the downlock microswitch is thought to have been responsible for the green 'locked' indication even though the mechanism was not actually overcentre.