

No: 5/86

Ref: 1b

Aircraft type and registration: Aero Subaru Fuji FA200 G-BBNV

No & Type of engines: One 160 hp Lycoming O-360-D2A piston engine

Year of Manufacture: 1973

Date and time (GMT): 6 March 1986 at 1020 hrs

Location: Oxford Airport

Type of flight: Training

Persons on board: Crew — 2 Passengers — None

Injuries: Crew — None Passengers — N/A

Nature of damage: Damage to nose undercarriage, propeller, engine cowling; engine shock loaded

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 62 years

Commander's Total Flying Experience: 12,500 hours (of which 320 were on type)

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

The accident occurred during the take-off roll on grass runway 27. Acceleration was slow due to the soft nature of the ground, and at a speed of approximately 55 knots, the aircraft decelerated violently and tipped onto its nose. After coming to rest, the fuel and electrics were switched off and the crew vacated the aircraft without injury.

It was found that the nose undercarriage leg had failed in the tubular steel section some 6 inches above the axle. This component is subjected to bending and torsional stresses. Examination revealed that the failure had resulted from one of a number of fatigue cracks in the internal bore of the tube, the surface of which was untreated and significantly corroded. The external surface was cadmium plated; however the end fittings, which mount the stub axle and the lower end of the oleo, had clearly been welded on before immersion in the treatment baths, thereby effectively sealing the tube and leaving the internal surface untreated.