No: 9/86 Ref: 1b

Aircraft type

and registration: Piper PA-46-310P G-SOFY

No & Type of engines: 1 Continental Motors Corp TS10-520-BEI piston engine

Year of Manufacture: 1984

Date and time (UTC): 22 June 1986 at 1300 hrs

Location: Ipswich Airfield

Type of flight: Private (pleasure)

Persons on board: Crew -1 Passengers - None

Injuries: Crew — None Passengers — N/A

Nature of damage: Propeller bent, engine shock loaded. Localised damage in and

around nosewheel well

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 50 years

Commander's Total

Flying Experience: 7100 hours (of which 50 were on type)

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

telephone enquiries.

The aircraft was being taken off on Runway 08 at Ipswich which has a grass surface. Just before rotation speed was reached the nose undercarriage collapsed and the propeller struck the ground under full power.

Investigation showed that the ram of the nose undercarriage actuator, which forms the drag brace when the undercarriage is lowered, had buckled close to the point where it exits the actuator body whilst in the fully extended position (undercarriage locked down).

The eye end attaching the actuator ram to the undercarriage leg had also failed in bending overload.

The failures are consistent with crippling of the actuator ram as a result of high drag forces on the nosewheel, with subsequent bending of the eye end.