

**Aircraft type and registration:** Piper PA-28R-201 G-THSL

**No & Type of engines:** 1 Lycoming 10-360-C1C6 piston engine

**Year of Manufacture:** 1978

**Date and time (UTC):** 29 December 1987 at 1525 hrs

**Location:** Southend Airport

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

**Persons on board:** Crew — 1                      Passengers — 2

**Injuries:** Crew — None                      Passengers — None

**Nature of damage:** Minor — to right wing

**Commander's Licence:** Commercial Pilot's Licence with Instrument and Full Instructor's Ratings

**Commander's Age:** 57 years

**Commander's Total Flying Experience:** 6636 hours (of which 652 were on type)

**Information Source:** Aircraft Accident Report Form submitted by the pilot and telephone enquiry by AAIB.

The aircraft was making an approach to runway 24. When the landing gear was selected down the right main landing gear green light did not illuminate. The gear was recycled three times to no avail, and the bulb was changed. There was still no green light and the emergency free-fall drill was carried out but this did not bring on the green down light.

The approach was continued and when the aircraft was approximately 1 to 1½ miles from touch-down the aerodrome controller observed that all three landing gear legs appeared to be down. The aircraft then landed on runway 24 with a surface wind of 250°/25 kt.

During the landing roll the right landing gear folded, the right wing started to drop and was held up with aileron until the wingtip touched the runway at approximately 10 kt ground speed. The aircraft slewed to the right onto the grass just past the intersection with runway 15/33. The diagonal upper torso restraint held during the deceleration and the pilot was uninjured.

The associated maintenance organisation noted what appeared to be inadequate lubrication in part of the right main landing gear retraction mechanism. On re-lubrication of the mechanism, the landing gear functioned correctly.

The organisation point out that the aircraft had completed only 70 hours flying since the last Annual Inspection, although that had taken place nine months before the accident. That would appear to have been the last occasion on which lubrication of this mechanism took place. Lubrication is required by the Light Aircraft Maintenance Schedule (LAMS) to be carried out in accordance with the Manufacturers recommendations. The Manufacturers Service Manual

specifies a 100 hour interval between lubrication operations on the landing gear and makes no provision for reducing this interval in the case of low aircraft utilisation rates. The LAMS schedule also only calls for functional testing of the system at 150 hour intervals and during Annual Inspections. Again, no specific provision is made for different treatment of infrequently operated aircraft.