

No: 1/92

Ref: EW/G91/10/06

Category: 1b

Aircraft Type and Registration: Piper PA-23-250 Aztec, G-XSFT

No & Type of Engines: 2 Lycoming IO-540-C4B5 piston engines

Year of Manufacture: 1977

Date & Time (UTC): 11 October 1991 at 1057 hrs

Location: Bournemouth International Airport

Type of Flight: Private

Persons on Board: Crew - 2 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Left main landing gear collapsed, damage to left propeller, wing and engine nacelle

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 67 years

Commander's Flying Experience: 12,285 hours (of which 5,100 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot and parts examination by AAIB.

The aircraft was engaged on a training detail on Runway 08 at Bournemouth Airport. It had performed one circuit and the full-flap touchdown had been normal. The intention was to execute a touch-and-go but, as the trainee was about to apply power, the crew heard the landing gear warning horn and the instructor told her not to advance the throttles. He simultaneously saw that the left main gear light was not illuminated and initiated gentle braking. Sensing that the left main gear was collapsing, he moved the landing gear selector lever from NEUTRAL to DOWN but was unable to prevent the left propeller from striking the ground. The aircraft slid to a halt on the runway and the crew evacuated without further incident.

Subsequent examination showed that the left main landing gear drag link centre bolt had failed, allowing the gear to collapse. Its part number was 402-427 and is referred to in the PA23 parts catalogue as item 48 on fig 25. The bolt and drag links were despatched to AAIB where metallurgical examination showed that the bolt fracture had been of a fatigue nature, only some 10% being static overload. The fatigue was in reverse bending and initiation appeared to originate from corrosion pitting on the shank of the bolt.

