AAIB Bulletin No: 2/2005

Ref: EW/G2004/06/25

Category: 1.2

Aircraft Type and Registration:	Cessna 310, N310QQ	
No & Type of Engines:	2 Continental IO-470-V0 piston engines	
Year of Manufacture:	1973	
Date & Time (UTC):	15 June 2004 at 2030 hrs	
Location:	Elstree Aerodrome, Hertfordshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to left hand side of aircraft and left main landing gear	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	45 years	
Commander's Flying Experience:	875 hours (of which 334 were on type) Last 90 days - 24 hours Last 28 days - 12 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and metallurgical examination of the failed components	

History of flight

A normal approach to Runway 26 was carried out with a wind of 330°/06 kt. The three green landing gear 'Down and Locked' indicator lights were illuminated and at approximately two miles from touchdown, full flap was selected and visually confirmed. The touchdown was smooth but during the landing roll the 'Gear Unsafe' warning horn sounded. The pilot looked down and noticed that the left main landing gear 'Down and Locked' green indicator light had extinguished and the red 'Gear Unsafe' indicator light had illuminated. Both the right main and nose landing gear 'Down and Locked' green indicator lights were illuminated. The left main landing gear collapsed a few moments later and the aircraft slewed to the left and came to rest in the grass area to the left of the runway. The pilot carried out the emergency shutdown drills and the aircraft was vacated without injury.

Conclusion

The left landing gear was examined by a metallurgist who found that all the failures were caused by a one-time overload force with no evidence of fatigue, corrosion or manufacturing defect.

The pilot/owner assessed that a possible cause may have been that the left main landing gear was slightly out-of-rig which allowed the side brace to unlock when running over a bump in the runway which resulted in the landing gear collapsing.