ACCIDENT

Aircraft Type and Registration:	Cessna 310Q, N850KF
No & Type of Engines:	2 Continental IO-470-VO piston engines
Year of Manufacture:	1968
Date & Time (UTC):	10 May 2008 at 1030 hrs
Location:	Jersey Airport
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Right wingtip, flap, aileron and propeller damaged
Commander's Licence:	Commercial Pilot's Licence
Commander's Age:	48 years
Commander's Flying Experience:	1,820 hours (of which 120 were on type) Last 90 days - 64 hours Last 28 days - 38 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and subsequent enquiries by the AAIB

Synopsis

The right main landing gear failed to lock down after the landing gear was selected down on the approach to land. This resulted in the failure of a component in the gear retraction/extension mechanism after landing, causing the right gear to partially retract. The right wingtip, flap, aileron and propeller contacted the runway and were damaged. The right gear was subsequently found to be stiff in operation; this was attributed to inadequate lubrication.

History of the flight

When the pilot selected the landing gear down approximately 3.5 miles out on an ILS/DME approach to Jersey Airport, the green gear down and locked light for the right main landing gear failed to illuminate. He initiated a go-around and when safe to do so, replaced the light bulb, but this made no difference. He then attempted to lower the landing gear using the normal and the emergency extension systems and tried sideslipping the aircraft in an attempt to lock the gear down, but these efforts were also unsuccessful. The green light for the right main gear remained off, leading the pilot to conclude that the gear had not locked down.

The pilot then made a visual approach to Runway 27, using full flap and reducing the speed to the blue-line figure. On rounding out, he held off until the stall warning occurred, to achieve a gentle touchdown. He

held the aircraft straight, allowing it to slow down without applying the brakes, in the hope that the right main gear, even if not locked down, would continue to support the aircraft. As he moved the mixture controls towards the fully closed position, the right wing started to drop. He then turned off the fuel, electrics and magnetos and once the aircraft had come to a halt, he exited via the main door.

Subsequent examination revealed that a link securing the right leg in the extended position had suffered an overload failure. The damage was consistent with the effect of the component, designed to carry only retraction and extension loads, being subjected to the ground loads due to the failure of the landing gear to reach the locked position. During retraction and extension tests performed following subsequent repairs, considerable stiffness of operation of the right leg was noted. This was attributed to poor lubrication of the pivot bearings. It was concluded that the resulting stiffness in operation had prevented the leg from reaching the fully extended position.