

Cessna P210N Centurian, G-VMDE

AAIB Bulletin No: 2/2004	Ref: EW/G2003/10/06	Category: 1.3
INCIDENT		
Aircraft Type and Registration:	Cessna P210N Centurian, G-VMDE	
No & Type of Engines:	1 Continental TSIO-520-P piston engine	
Year of Manufacture:	1978	
Date & Time (UTC):	8 October 2003 at 0930 hrs	
Location:	Northwest of Cardiff Airport, Wales	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Main gear door accumulator broken, small dent in internal fuselage	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	45 years	
Commander's Flying Experience:	4,200 hours (of which 600 were on type)	
	Last 90 days - 100 hours	
	Last 28 days - 35 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The aircraft was on a flight from Cardiff Airport, Wales, to Abbeyshrule Airport, Eire. The takeoff and subsequent landing gear retraction were normal. The aircraft climbed out to the north west of Cardiff when, on passing 3,000 feet, the pilot heard a bang and felt a thump, apparently from the rear of the fuselage. Using the mirror on the port wing he could see that the main landing gear door on the left side was partly open. At the same time the electrically driven hydraulic pump that operates the landing gear began to run. The pilot immediately selected the landing gear down, but the gear remained up. Considering that the hydraulic fluid could be pumping out of the system the pilot pulled the circuit breaker for the pump. He then declared an emergency and requested a return to Cardiff.

The pilot lowered the landing gear using the hand operated pump. The gear came down and the three green lights illuminated, but as soon as they did so instead of the pump stroke becoming 'stiff' as expected, it became 'limp'. The landing at Cardiff was successful and the aircraft was taxied to the ramp area.

After landing an inspection of the aircraft was carried out and it was discovered that the end cap of the main gear door accumulator had come off, causing a dent in the side of the fuselage in the process. The accumulator body had also been displaced in its mounting. The hydraulic reservoir was empty and there was evidence of hydraulic fluid in the landing gear bay and on the side of the fuselage. The cap of the main gear door accumulator is normally retained by a circlip. There was no record of any recent maintenance on the accumulator and the reason for the end cap becoming detached was not determined.