ACCIDENT

Aircraft Type and Registration: Cessna 172RG, G-BILU

No & Type of Engines: 1 Lycoming O-360-F1A6 piston engine

Year of Manufacture: 1980 (Serial no: 172RG-0564)

Date & Time (UTC): 16 December 2012 at 1815 hrs

Location: Stapleford Aerodrome, Essex

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Damage to landing gear doors, propeller and engine

Commander's Licence: Private Pilot's Licence

Commander's Age: 51 years

Commander's Flying Experience: 3,665 hours (of which 1,500 were on type)

Last 90 days - 28 hours Last 28 days - 12 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

and additional inquiries by the AAIB

Synopsis

The pilot was unable to extend the nose landing gear, despite several attempts. A successful forced landing on the grass at Stapleford was carried out. It was thought that wear in the nose gear door mechanism had caused the nose gear to jam.

History of the flight

The aircraft arrived at Stapleford after a flight from Cardiff and joined the circuit to land on Runway 22. When the pilot selected the landing gear down, he felt the main gears lock into place, but the gear indicator light first failed to illuminate and then lit red. A visual check suggested that the main gears were down and locked, but he could not see the nose gear. Recycling

the gear did not rectify the situation and he was unable to obtain a green indication.

The pilot radioed the control tower to tell them he was going around for another circuit, during which time he tried recycling the gear several times, but to no avail. He then asked the tower for a visual inspection and was told that the nose landing gear had not extended. After several more recycling and manual hydraulic pump attempts, a further visual inspection from the tower confirmed that the nose gear had still not moved and so the pilot carried out a landing on the mainwheels only on the grass to the left of Runway 22.

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Upon recovery, it was found that the nose gear would not extend because it was jammed by the gear doors. Subsequent testing of the retraction system showed no anomalies, but it was noted that a number of bushes and linkages associated with the gear doors were worn and it is thought that a cumulative effect of the wear had caused the jamming condition.

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