ACCIDENT

Aircraft Type and Registration: Cessna 310Q, N25XL

No & Type of Engines: 2 TCM 10-470-VO piston engines

Year of Manufacture: 1974 (Serial no: 310Q)

Date & Time (UTC): 17 January 2021 at 1354 hrs

Location: Belfast International Airport

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Substantial damage to aircraft and minor scrape

damage to runway surface and runway edge

lighting

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 58 years

Commander's Flying Experience: 1,590 hours (of which 900 were on type)

Last 90 days - 5 hours Last 28 days - 1 hour

Information Source: Aircraft Accident Report Form submitted by the

pilot

The pilot intended to fly some circuits to maintain recency and to conduct engine health checks. On the first landing the aircraft suddenly veered to the right and came to rest on the grass beside the runway. The pilot was uninjured and reported the landing was normal, and during approach the three green lights, indicating the landing gear was down and locked, were illuminated.

The AAIB did not attend, but the aircraft was later examined by a licenced engineer. It was identified that the right landing gear torque tube had failed in torsion (Figure 1). This torque tube should not have been carrying any load once the gear was locked down. Further examination revealed the landing gear had visible corrosion and an apparent lack of adequate lubrication of the pivot joints (Figure 2). An Annual / 100-hour inspection had been completed on 30 September 2020, 3½ months earlier, which included an inspection of the landing gear.

The AAIB has previously reported on other similar events to this type of aircraft¹ where lack of lubrication and/or freedom of movement of the landing gear mechanism pivot joints was a factor.

Footnote

¹ See AAIB reports [accessed June 2021]:

N119RS - EW/G83/12/07 (https://www.gov.uk/aaib-reports/cessna-c310q-n119rs-30-december-1983)

G-SOUL - EW/C95/11/6 (https://www.gov.uk/aaib-reports/cessna-310r-g-soul-22-november-1995)

N850KF - EW/G2008/05/19 (https://www.gov.uk/aaib-reports/cessna-310q-n850kf-10-may-2008)



Figure 1
Right main landing gear torque tube showing condition and torsional failure



Figure 2
Images showing condition of right main landing gear mechanism pivot joints