

AAIB Bulletin No: 1/95

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Category: 1.3

Aircraft Type and Registration: Cessna U206A Super Skywagon, G-ATLT
No & Type of Engines: 1 Continental IO-520-A piston engine
Year of Manufacture: 1966
Date & Time (UTC): 26 August 1994 at 1319 hrs
Location: Netheravon Airfield, Wiltshire
Type of Flight: Private
Persons on Board: Crew - 1 Passengers - None
Injuries: Crew - None Passengers - N/A
Nature of Damage: Nose leg and front fuselage structure damaged; propeller blades distorted and engine shock loaded
Commander's Licence: Commercial Pilot's Licence
Commander's Age: 36 years
Commander's Flying Experience: 1,700 hours (of which 105 were on type)
Last 90 days - 120 hours
Last 28 days - 50 hours
Information Source: Aircraft Accident Report Form submitted by the pilot and enquiries by the AAIB

The pilot was taxiing G-ATLT across the grass field for a solo familiarisation flight prior to a parachute dropping sortie. As he did so he heard a noise which he thought was the nose oleo 'knocking' because it was under inflated. However, he was not unduly concerned because the aircraft had already flown that day and he had experienced similar noises on the same aircraft before. The weather was good and, with a surface wind of 290°/10 kt, the pilot was cleared for takeoff on Runway 29; this runway has a pronounced downhill initial gradient. Acceleration was normal but, shortly after the aircraft went over a slight bump in the surface, the pilot heard a 'bang'; he stated that the aircraft nose dropped and the aircraft then slewed to the right side of the runway and came to a halt.

The nose leg was examined to determine the reason for its collapse but this examination only occurred after the aircraft had been salvaged and then moved again to another location; not all of the pertinent debris and components were located. Some of the nose leg attachments had suffered massive distortion and all the failures were in overload. Both arms of the nose leg fork had broken off and one was not found. The axle was intact but distorted at one end. Those parts of the two wheel bearings

which were available were intact and showed no signs of distress. The nosewheel's central bore was ruptured on both sides of the wheel, where the axle assembly (the axle and the spacers mounted on it) had burst it under excess bending loads. It was evident that the axle and spacer assembly had not been restrained by the axle bolt and that the assembly and wheel had become detached from the fork. The axle bolt was not found.

This aircraft had a previous nose leg collapse on 17 August 1993 as reported in AAIB Bulletin 11/93; on that occasion the nose leg had collapsed forward as a result of the failure of its drag brace. Since the previous accident, G-ATLT had flown 101 hours.

Following an approach to the 862m paved runway in calm wind conditions the aircraft overran the end and struck a post and wire fence. The pilot attributes the cause of the accident to his failure to go-around after landing too far along the runway.