

AAIB Bulletin No: 12/94

Ref: EW/G94/09/05

Category: 1.2

Aircraft Type and Registration: Piper PA-23-250 Aztec, G-BBCC

No & Type of Engines: 2 Lycoming IO-540-C4B5 piston engines

Year of Manufacture: 1969

Date & Time (UTC): 3 September 1994 at 1245 hrs

Location: Sywell Airfield, Northamptonshire

Type of Flight: Public Transport

Persons on Board: Crew - 1 Passengers - 5

Injuries: Crew - None Passengers - None

Nature of Damage: Damage to left main landing gear, flap and local wing structure

Commander's Licence: Commercial Pilot's Licence with Instructor Rating

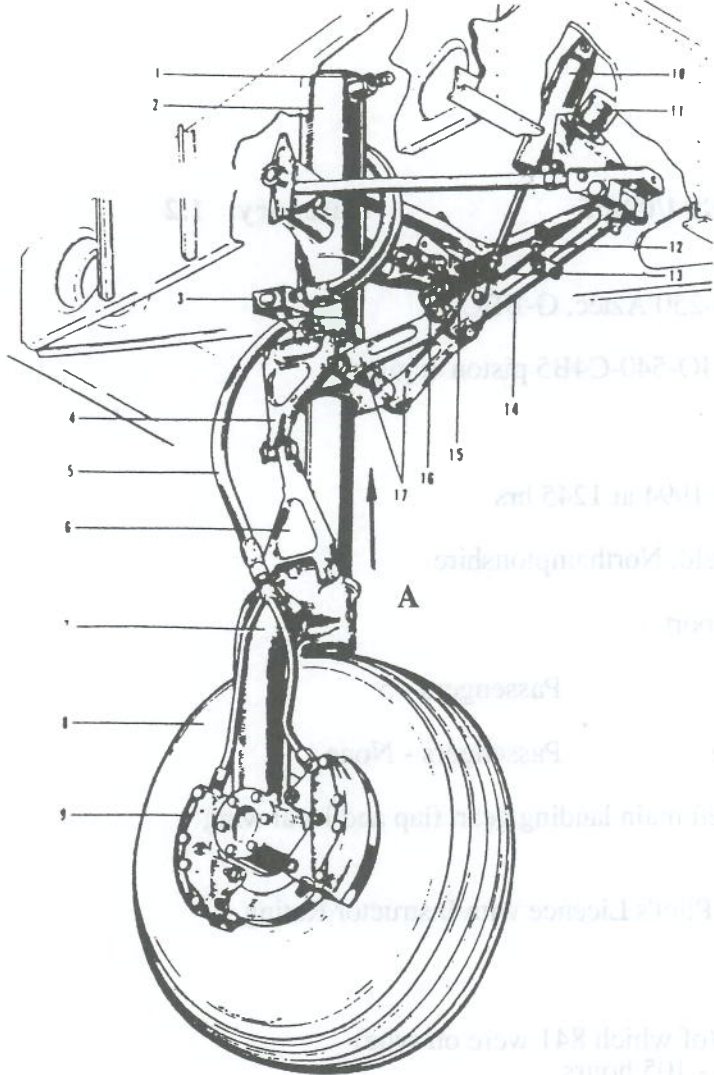
Commander's Age: 40 years

Commander's Flying Experience: 4,360 hours (of which 841 were on type)
Last 90 days - 105 hours
Last 28 days - 36 hours

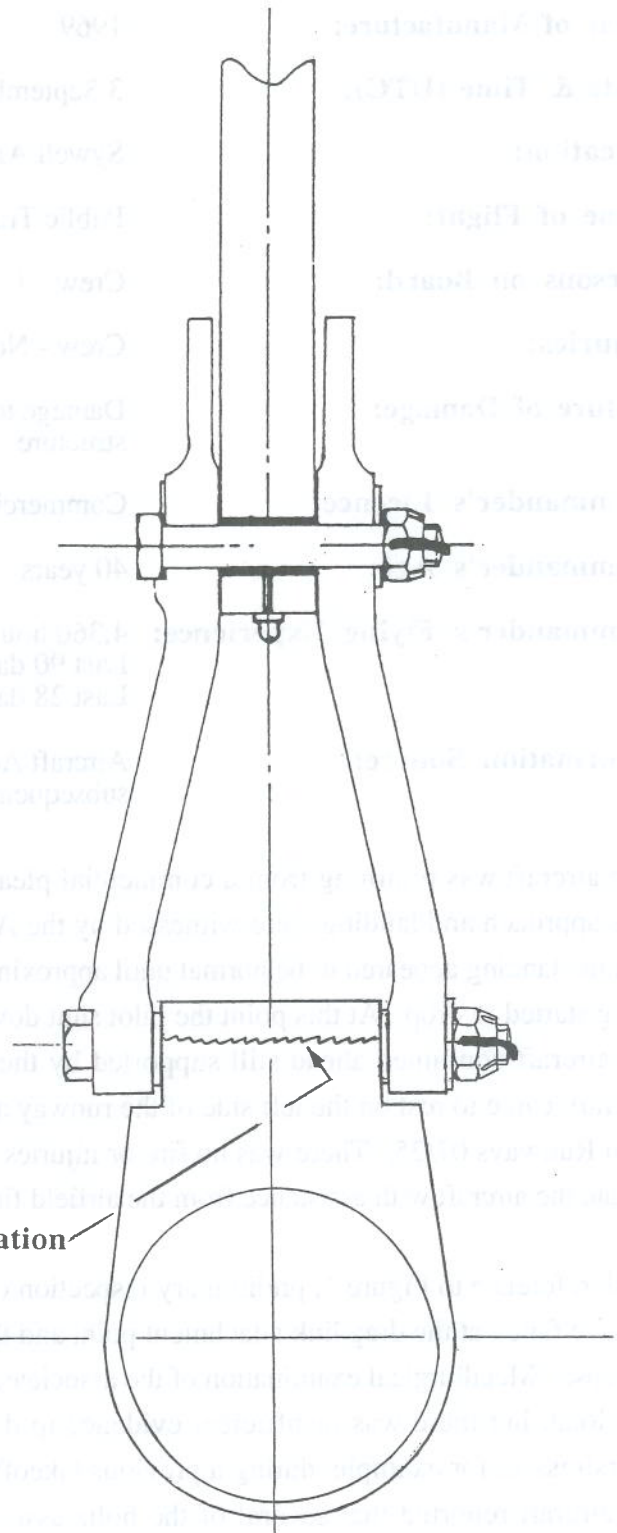
Information Source: Aircraft Accident Report Form submitted by the pilot and subsequent enquires by the AAIB

The aircraft was returning from a commercial pleasure flight and made an approach to Runway 21. The approach and landing were witnessed by the AFIS supervisor in the control tower who reported that the landing appeared to be normal until approximately 200 metres into the ground roll when the left wing started to drop. At this point the pilot shut down the engines and feathered the propellers, whilst the aircraft continued ahead still supported by the partially collapsed left main landing gear. The aircraft came to rest on the left side of the runway approximately 200 metres north of the intersection with Runways 07/25. There was no fire or injuries and the pilot and his five passengers were able to vacate the aircraft with assistance from the airfield fire service.

With reference to Figure 1, preliminary inspection of the aircraft showed the landing gear oleo casing to have failed at the drag link attachment point and that this had allowed the leg to pivot rearwards and collapse. Metallurgical examination of the associated fracture showed that it had occurred as a result of overload, but there was insufficient evidence to determine whether the attachment point had been overstressed, for example, during a previous takeoff/landing. Maintenance personnel who examined the aircraft reported that several of the bolts associated with the drag link pivots, when extracted, appeared to be distorted, but that this was unlikely to have occurred as a result of the gear collapse.



1. AIRCHARGE VALVE
2. GEAR STRUT HOUSING
3. ANTI-RETRACTION VALVE
4. TORQUE LINK, UPPER
5. BRAKE LINE
6. TORQUE LINK, LOWER
7. FORK ASSEMBLY
8. TIRE
9. BRAKE HOUSING
10. GEAR ACTUATING CYLINDER
11. TIME DELAY VALVE
12. RETRACTION ROD
13. LATCH ASSEMBLY
14. DRAG LINK, UPPER
15. SPRINGS
16. INDICATING SWITCH
17. DRAG LINK, LOWER



Fracture location

View in direction of arrow A