No: 10/85 Ref: EW/G85/07/14

Aircraft type

and registration: Cessna P206D G-AWUA (light single engine fixed wing aircraft)

Year of Manufacture: 1966

Date and time (GMT): 28 July 1985 at 1700 hrs

Location: Forton Airfield, near Shrewsbury

Type of flight: Parachute dropping

Persons on board: Crew -1 Passengers -5

Injuries: Crew — None Passengers — None

Nature of damage: Nose gear assembly, propeller blades, and fuselage fairings

damaged

Commander's Licence: Private Pilot's Licence

Commander's Age: 38 years

Commander's Total

Flying Experience: 278 hours (of which 36 were on type)

Information Source: Aircraft Accident Report Form submitted by pilot, telephone

report from engineer, and AIB examination of steering collar.

The aircraft took off from Forton Airfield with a pilot, a jumpmaster, and 4 student parachutists on board. The student parachutists were despatched normally, although the pilot noted that the in-flight pedal forces were lower than usual.

During the landing roll the pilot heard a grinding noise and thought that a tyre had gone flat. After a few seconds the nose went down and the aircraft came to a halt with the nosewheel detached.

Examination of the aircraft showed that the steering collar (fig 1) on the nose gear had failed. This collar transmits the pilot's steering commands to the upper arm (fig 1, to right) of the torque link scissors assembly; failure of the steering collar would allow the lower strut to descend and the nosewheel to castor.

Metalurgical examination of the two fractures indicated that the initial fracture had occurred at A, in the area of reduced cross-section, and that the final failure occurred at area B. The initial fracture shows some evidence of a small area of fatigue originating in an area of rough surface finish on an inside radius (point C).

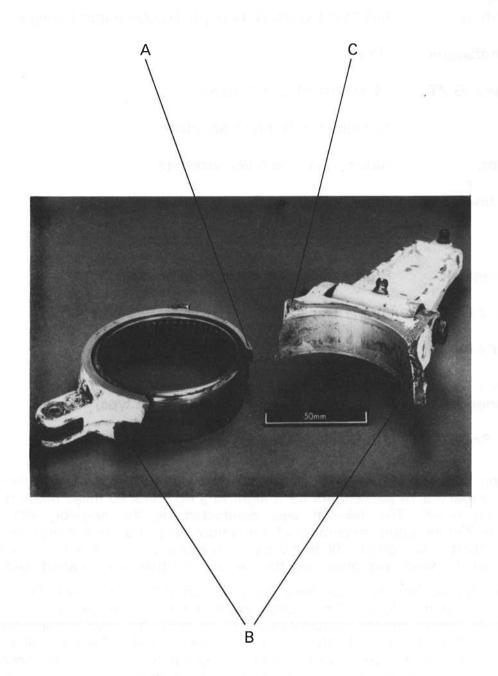


Fig 1