



Ref: 7612

**SOUTH AFRICAN CIVIL AVIATION AUTHORITY****ACCIDENT REPORT – EXECUTIVE SUMMARY**

<b>Aircraft Registration</b>	<b>ZS-DVD</b>	<b>Date of Accident</b>	3 January 2003	<b>Time of Accident</b>	0645Z
<b>Type of Aircraft</b>	PA-30	<b>Type of Operation</b>	Private (Hire and Fly)		
<b>Pilot-in-command Licence Type</b>	Commercial	<b>Age</b>	40	<b>Licence Valid</b>	Yes
<b>Pilot-in-command Flying Experience</b>	Total Flying Hours	629.5	Hours on Type	119.7	
<b>Last point of departure</b>	FAFB (Ficksburg)				
<b>Next point of intended landing</b>	FABM (Bethlehem)				
<b>Location of the accident site with reference to easily defined geographical points (GPS readings if possible)</b>					
Runway 11/29, Bethlehem aerodrome					
<b>Meteorological Information</b>	CAVOK, Wind: 270°/5 Knots, Temperature: 18°C				
<b>Number of people on board</b>	1+3	<b>No. of people injured</b>	Nil	<b>No. of people killed</b>	Nil

**Synopsis**

The commercial pilot was accompanied by three passengers on what was to be a sight seeing flight in the Drakensberg region. The aircraft departed Ficksburg at 0615Z and routed to Bethlehem aerodrome for a re-fuelling stop where a normal landing was made on Runway 11.

Approximately 2/3 of the runway was used before a right hand turn was made in order to backtrack to the fuel pumps. The pilot had completed the 180° turn and had backtracked for approximately 10m when the left hand main landing-gear side brace stud failed causing the undercarriage on that side to collapse.

The aircraft had been moving very slowly when the left-hand gear collapsed which resulted in minimal damage to the left-hand wing tip and left-hand propeller.

No injuries were sustained.

The last MPI was certified on 19 February 2002 at 4759 airframe hours. The aircraft had accumulated 95 airframe hours since the last MPI.

**Probable Cause**

According to metallurgical analysis, the failed undercarriage stud did not conform to the manufacturer's material specifications (bogus part), which resulted in premature failure of the stud under the influence of reversed bending stresses.