



Ref: 7616

SOUTH AFRICAN CIVIL AVIATION AUTHORITY

ACCIDENT REPORT – EXECUTIVE SUMMARY

Aircraft Registration	ZS-MPM	Date of Accident	6 January 2003	Time of Accident	1400Z
Type of Aircraft	PIPER PA34-220T		Type of Operation		Private
Pilot-in-command Licence Type	Commercial	Age	46	Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	1566.3	Hours on Type	Unknown	
Last point of departure	Port Alfred				
Next point of intended landing	Kwandwe Game Reserve				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)					
On landing at Kwandwe Game Reserve					
Meteorological Information	CAVOK, Wind: 270/15, Temperature: 26°C				
Number of people on board	2 + 0	No. of people injured	Nil	No. of people killed	Nil

Synopsis

The pilot in-command was accompanied by another pilot on a private flight from Port Alfred to Kwandwe Game Reserve when the accident occurred.

According to eye-witnesses at the game reserve, the left-hand main gear was “flapping” when the gear was extended and had turned through 90° when the aircraft landed. In the process the left main gear separated from the aircraft resulting in a ground loop to the left.

Inspection of the left-hand main landing gear revealed that the lower torque link had failed in the area where it is connected to the upper torque link.

One of the fracture faces of the torque link had been damaged and no meaningful fracture information could be gleaned from it. The other fracture face had a porous grain structure and seemed to have failed as a result of overload.

Examination of the component revealed no signs of any pre-existing crack/s that could have weakened the structural integrity of the component.

According to available documentation, the aircraft had a valid Certificate of Airworthiness and had accumulated a total of 2875 flying hours at the time of the accident. The last MPI was certified on 22 October 2002 at 2810 hours, 65 hours prior to the accident.

Probable Cause

The lower left hand torque link failed during or after take off from Port Alfred aerodrome. This allowed the wheel to turn sideways and resulted in the aircraft landing with the left hand gear turned through 90°. On landing the gear separated from the aircraft and the aircraft ground looped to the left.

Due to the fact that one of the fracture faces of the failed torque link was damaged, the existence of a pre-existing crack could neither be confirmed nor excluded. The other fracture face showed that that portion of the component had failed as a result of overload.