Ref: 7947



## **SOUTH AFRICAN CIVIL AVIATION AUTHORITY**

## ACCIDENT REPORT – EXECUTIVE SUMMARY

Aircraft Registration	ZS-DPB		Date of Accident	17 /	April 2005	Time of Acciden	t 14:25Z
Type of Aircraft	Piper PA22-160 (Tri-Pacer)		Type of Operation		Training		
Pilot-in-command Licence Type		Student Pilot License	Age	34	Licence Valid	Yes	
Pilot-in-command Flying Experience		Total Flying Hours	1009		Hours on Type	26.3	
Last point of departure Wonderboom Aerodrome (FAWB)							
Next point of intended landing Wonderboom Aerodrome (FAWB)							

Location of the accident site with reference to easily defined geographical points (GPS readings if possible)

On Runway 29 at Wonderboom Aerodrome.

Meteorological Information	Surface wind: West at 5 knots, Temperature: 22°C, QNH: 1018, High Clouds.				
Number of people on board	1 + 0	No. of people injured	0	No. of people killed	0
Synopsis					

The pilot who was also the holder of a Microlight pilot's licence, was practising solo circuits and landings at Wonderboom Aerodrome towards obtaining his private pilot licence. The pilot stated that on his second approach for a touch and go landing on Runway 29 at an indicated airspeed of 80mph and 1notch of flaps at 20° he flared the aircraft on final approach, but the aircraft drifted to the left of the centre line.

According to the pilot he executed a 3 point landing when the right-hand wing dropped and the nose landing gear collapsed. The right hand wingtip and propeller made contact with the runway. The aircraft skidded for approximately 50 meters on the collapsed nose landing gear and right hand wing. The aircraft came to rest and then the engine caught fire due to the sparks caused by the carburettor contacting the tar.

The pilot sustained no injuries. The aircraft sustained damage to the nose landing gear, right-hand wing and propeller.

The last MPI (Mandatory Periodic Inspection) was certified on 10 February 2005 at 5667.2 airframe hours. At the time of the accident the aircraft had accumulated a further 26.7 airframe hours since the last MPI was certified.

According to available records the Aircraft Maintenance Organisation (AMO) that certified the last MPI on the aircraft prior to the accident was in possession of a valid AMO approval, No.142 with an expiry date of 31 July 2005. The CAA conducted an audit on the AMO on 22 July 2004 where 10 findings were raised in terms of their Manual of Procedure. The findings were addressed by the AMO after the audit. A surveillance inspection was carried out on 18 February 2004. The aircraft was type accepted in South Africa on 15 October 1968 as amended and according to documentation all AD's and SB's was complied with.

The flying school held a valid Aviation Training Organisation Accreditation and Approval Certificate, CAA/0215, which was issued on 03 March 2005 with an expiry date of 03 March 2006. The Civil Aviation Authority last audited the Aviation Training Organisation prior to the accident on 03 March 2005 and no findings were raised and prior to this audit another audit were conducted on 27 February 2004.

## **Probable Cause**

It appears that the pilot flared the aircraft too high and a high sink rate followed. The aircraft impacted the ground hard on three wheels which resulted in the nose landing gear to collapse due to existing cracks that weakened the structure at the edge of a welded joint.

IARC Date		Release Date	
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