



Ref: 7805

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

<b>Aircraft Registration</b>	<b>ZS-CTB</b>	<b>Date of Accident</b>	18 May 2004	<b>Time of Accident</b>	1658Z
<b>Type of Aircraft</b>	Cessna 175		<b>Type of Operation</b>	Training	
<b>Pilot-in-command Licence Type</b>	Commercial	<b>Age</b>	57	<b>Licence Valid</b>	Yes
<b>Pilot-in-command Flying Experience</b>	Total Flying Hours	19466	Hours on Type	62.6	
<b>Last point of departure</b>	Rustenburg, FARG				
<b>Next point of intended landing</b>	Pilanesberg, FAPN				
<b>Location of the accident site with reference to easily defined geographical points (GPS readings if possible)</b>					
Approximately 16nm East of FARG. GPS position: S25°31'44.6" and E 27°33'49.7".					
<b>Meteorological Information</b>	Calm wind conditions prevailed. Temperature: 10°C. Visibility: 10km with no cloud.				
<b>Number of people on board</b>	2 + 1	<b>No. of people injured</b>	Nil	<b>No. of people killed</b>	Nil

**Synopsis**

The private pilot was accompanied by an instructor and a passenger on a Night cross-country training flight towards a Night Rating with the following planned routing: FARG (Rustenburg) - HBV beacon – Overhead FABS (Brits) – FAPN (Pilanesberg) – FARG. The accident occurred on the leg from FABS to FAPN.

The aircraft took-off from FARG at 1618Z and arrived at HBV at 1635Z where after it routed to FABS and arrived overhead FABS at 1642 and then routed to FAPN.

Approximately 8 minutes into the flight to FAPN, the pilot (instructor) noticed an unfamiliar smell in the cockpit and that the visibility through the front windscreen was deteriorating. Approximately 2 minutes later, the entire windscreen was covered in oil resulting in zero forward visibility. The engine noise and rpm then increased to approximately 3300 rpm and the pilot noted that the engine oil pressure had reduced to zero.

The instructor immediately pulled back the propeller, throttle and mixture controls. The engine continued to run at high rpm for a short period after which it stopped.

The aircraft descended to approximately 4500 ft and the instructor selected 10° flap and asked his student to switch off the fuel and to open his door while the instructor continued with the glide with reference to the instruments. At approximately 4000ft the instructor applied full flap and requested the student to look through his door opening and to tell him when they were almost on the ground. As they neared the ground, the instructor ensured that the wings were level and reduced airspeed to a minimum.

The aircraft touched down hard, skidded for approximately 12m before coming to rest in a clump of trees.

The aircraft was substantially damaged but none of the occupants were injured and they were able to walk to a nearby road to obtain help.

**Probable Cause**

The governor oil line fractured at its forward attachment and allowed engine oil to vent overboard. In the process the propeller over-spun and the pilot had no alternative than to shut down the engine and carry out a forced landing at night.

A contributory factor was the fact that the governor oil line was not installed as per manufacturers instructions in that the required oil line support clamps were not installed. The absence of these resulted in the oil line being subjected to vibrations/fluctuating stresses during engine operation which ultimately caused a fatigue related failure of its forward attachment.