



Ref: 0296

SOUTH AFRICAN CIVIL AVIATION AUTHORITY

INCIDENT REPORT – EXECUTIVE SUMMARY

Aircraft Registration	ZS-MTJ	Date of Incident	23 September 2003	Time of Incident	0821Z
Type of Aircraft	Cessna 172	Type of Operation	Training		
Pilot-in-command Licence Type	Commercial	Age	31	Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	448.5	Hours on Type	286.1	
Last point of departure	Wonderboom aerodrome				
Next point of intended landing	Wonderboom aerodrome				
Location of the incident site with reference to easily defined geographical points (GPS readings if possible)					
West of Wonderboom aerodrome					
Meteorological Information	Wind: 080/8, Temperature: 15°C, Dew Point Temperature: 7° C. Visibility: good				
Number of people on board	2 + 0	No. of people injured	Nil	No. of people killed	Nil
Synopsis	<p>At approximately 0753Z, the instructor and student took off from Wonderboom Aerodrome for circuit and landing training.</p> <p>The Instructor stated that after take-off at a height of 700ft agl, he reduced power to simulate an engine failure after take-off. He further stated that at 300ft agl during the recovery phase, he briefly regained full power where after the engine failed. He attempted to re-start the engine but it was to no avail and he executed a forced landing on an open field to the west of Wonderboom aerodrome.</p> <p>There were no injuries and the aircraft did not sustain any damage during the forced landing.</p> <p>The fuel system was checked on site and found free from any contamination. The engine was then ground run at full power and performed satisfactory in all aspects. The aircraft was then flown back to Wonderboom without further incident.</p> <p>The carburettor was removed and dismantled by an approved Engine Overhaul Shop at Wonderboom. It was established that the carburettor float was worn with scuff marks which indicated that the float could have become stuck inside the housing and caused the engine to malfunction.</p> <p>The last MPI was certified on 29 August 2003 at a total of 4964 airframe hours and 1587 engine hours since new. The aircraft had accumulated 43 hours since the last MPI.</p> <p>According to the weather conditions at the time and the Carburettor Icing Probability Chart, serious carburettor icing could have occurred with the temperature at 15°C and the dew point being at 7°C.</p>				
Probable Cause					
<p>The carburettor float was worn and could have become stuck against the housing causing the engine to malfunction. According to the Carburettor Icing Probability Chart, serious carburettor icing could have occurred if the pilot failed to apply carburettor heat.</p>					