



Ref: 7857

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

Aircraft Registration	ZS-JBF	Date of Accident	11 September 2004	Time of Accident	1100Z
Type of Aircraft	CESSNA 150M		Type of Operation	Private	
Pilot-in-command License Type	Private	Age	46	License Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hrs	435.0	Hours on Type	161.5	
Last point of departure	Vereeniging Aerodrome (FAVV)				
Next point of intended landing	Vereeniging Aerodrome (FAVV)				

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

Approximately 2nm North of FAVV (GPS position: South 26° 33. 062' East 027° 57.560', elevation 5002 feet)

Meteorological Information	Wind: 280/8kt, Temperature 22°C, Dew point -4°C, CAVOK				
Number of people on board	1 + 1	No. of people injured	1 + 1	No. of people killed	0

Synopsis

The pilot departed early in the morning from Saffier (a private aerodrome near the Vaal river) to Vereeniging aerodrome (FAVV) where he would attend the Vereeniging air-show. After landing at FAVV, the aircraft was parked outside (in the open) for a period of approximately 8 hours. An arrangement was made with the parents of a little boy that the pilot would take him for a local pleasure flight of the area during the lunch break.

During the pilot's pre-flight inspection, prior to departure he uplifted approximately 15 litres of fuel from a container. Both fuel tank levels were measured by means of the dipstick method, with both tanks indicating ¼ of full.

He was cleared for take-off from Runway 03 to turn out left and hold 4nm out. The pilot described the take-off and climb out as normal. Once pass the threshold of Runway 21 the rate of climb decreased slightly. With the throttle fully open, an engine rpm of 2450rpm was obtained, and the indicated airspeed was between 55-60 knots. The pilot checked the mixture and enriched it slightly. The rate of climb (ROC) improved to between 400-500 feet/min. Approximately one minute later the engine failed and due to limited height available the pilot elected an open field to his right to execute a forced landing on, although he did consider restarting the engine, but was too low.

The terrain was very rocky, and the pilot attempted to decrease the speed as low as possible, prior to impact he attempted to flare the aircraft but the nose dropped. This caused the nose wheel assembly to fail on impact and the aircraft nosed over, coming to rest approximately 22m from the first point of impact in an inverted attitude.

Both occupants managed to escape from the wreckage unassisted and moved away fearing a possible fire/explosion. Shortly after the event, a helicopter landed at the scene and both occupants were airlifted to the local Medi-Clinic for observation. They were later discharged from hospital having sustained only minor cuts and bruises.

The last Mandatory Periodic Inspection (MPI) prior to the accident was certified on 21 November 2003, at 8910.6 airframe hours. Since the MPI was certified a further 20.0 hours were flown.

Probable Cause

The engine most probably failed due to fuel starvation, which was caused by one or a combination of the following: Improper fuel tank venting or a restriction/blockage in the fuel shut off valve assembly resulting in a forced landing on rocky terrain with the coming to rest in an inverted attitude.