



A00-082-7225-PTB

SOUTH AFRICAN CIVIL AVIATION AUTHORITY

ACCIDENT REPORT – EXECUTIVE SUMMARY

Date of Accident	27 July 2000	Time of Accident	0825 Z	
Aircraft Registration	ZS-PTB	Type of Aircraft	Baron E55	
Pilot-in-command Licence Type	Private		Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	±6539	Total Hours on Type	±800
Type of Operation	Private			
Last point of departure	FALA (Lanseria)			
Next point of intended landing	FAPB (Pietersburg)			

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

1 nm South West of Lanseria aerodrome

Meteorological Information Fine weather conditions prevailed at Lanseria at the time of the accident.

Number of people on board	1+3	No. of people injured	Nil	No. of people killed	Nil
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Synopsis

The private pilot was accompanied by three passengers on a flight from Lanseria to Pietersburg on 27 July 2000. Approximately 35 minutes after take off the pilot encountered adverse weather conditions and decided to return to Lanseria. While the aircraft was established in the circuit for runway 06 Left at Lanseria aerodrome at a height of approximately 800 ft AGL, both engines failed simultaneously. The pilot then selected the auxiliary tanks, which had no apparent effect and the main tanks were re-selected. A forced landing was executed on an open field approximately 1nm South West of Lanseria. The aircraft was substantially damaged but no injuries were sustained.

When the CAA investigators arrived on the scene only 50 minutes after the event, neither the pilot nor any of his passengers were on the scene, although the CAA requested the pilot to remain on the scene until their arrival.

The fuel tanks were inspected and 5.5 litres and 1.5 litres of fuel was drained from the left and right-hand main tanks respectively. The right-hand auxiliary tank appeared to be ½ to ¾ full with the left-hand auxiliary tank ruptured and empty. Only two fuel quantity gauges are installed in the aircraft. They indicate the amount of fuel in either the main tanks or auxiliary tanks for their respective wings. A two-position selector switch on the pilot’s sub-panel determines the tanks, main or auxiliary, to which the indicators are connected.

During the interview with the pilot he stated that the fuel quantity gauges did not move after fuel was uplifted nor did they move during the flight. This could be an indication that the pilot had the auxiliary tanks gauges selected on the two-position selector switch although the main tanks were selected on the fuel tank selection valve.

Probable Cause

The pilot had the main tanks selected for the entire flight, which resulted in the depletion of both main tank’s fuel supply leading to engine failure. The probable cause of the accident is therefore attributed to fuel exhaustion as a result of fuel mismanagement