VIRGINIA FLIGHT SCHOOL SAFETY ARTICLE – NO 05/08

DECISION MAKING – ACCIDENT ANALYSIS

Read the following SA CAA accident executive summary and then examine the decisions that were made. Could alternate, better decisions have been made for a more desirable outcome?

Ref: 7962

SOUTH AFRICAN CIVIL AVIATION AUTHORITY

EXECUTIVE SUMMARY - AIRCRAFT ACCIDENT REPORT

Aircraft Registration	ZS-CKH	**Date of Accident**	20 May 2005	**Time of Accident**	1245Z
Type of Aircraft	Piper PA24-250		**Type of Operation**	Private	
Pilot-in-command Licence Type	Private	**Age**	46	**Licence Valid**	Yes
Pilot-in-command Flying Experience	Total Flying Hours	882		Hours on Type	33
Last point of departure	Bothaville Aerodrome				
Next point of intended landing	Beaufort West Aerodrome				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)					
Approximately 5 nm in line with Runway 26 at Beaufort West					
Meteorological Information	The pilot reported fine weather conditions, surface wind 160°/10, Temperature 22°C				
Number of people on board	1 + 2	**No. of people injured**	0	**No. of people killed**	0

Synopsis

The pilot bought the aircraft approximately 2 months prior to the accident. He attended the agricultural show at Bothaville and had planned to land at Beaufort West aerodrome for fuel on the way to Grabouw aerodrome. The pilot reported that on approach to Beaufort West aerodrome the engine failed. During an attempt to reach the runway, the pilot also forgot to extend the undercarriage for the landing. Damage was sustained on the lower engine cowlings, propeller and belly skins from the firewall to aft of the main spar.

The occupants were reported not injured. The pilot was in possession of a valid Private Pilot license and the aircraft type was endorsed on his license. He also held a valid medical certificate with restrictions Bi-focal glasses, which was valid until 31 December 2005.

According to available records the aircraft was correctly maintained. Investigation did not reveal any defects or malfunctions on the aircraft that could have contributed to the cause of the accident. The engineer who repaired the aircraft reported that there was no fuel in the fuel tanks. The aircraft was recovered to the Maintenance Organisation for fuel floats and gauges tests and they were all found to be operating normal. The aircraft was type accepted in South Africa. The AMO who repaired the aircraft was audited in the last two years and no major findings were determined. According to SACAA records all ADs and SBs were complied with.

The aircraft had flown a total of 25.62 hours since the last MPI was carried out on the 10 November 2004 with a total of 4251.00 airframe hours.

Probable Cause

It appears that when the engine failed due to fuel exhaustion the pilot concentrated too much on making the field which resulted in him forgetting to lower the undercarriage during landing.

Contributing factor is attributed to poor flight planning by the pilot with regards to fuel for the flight.

IARC Date		Release Date	

SOME POINTS TO PONDER

- Did the pilot know his aircraft systems well?
- Was effective flight planning done?
- Did the pilot become fixated?
- Did the pilot have any apparent knowledge of CRM?

"PROPER RISK ASSESSMENT AND MANAGEMENT BEGINS BEFORE THE FLIGHT"