

AIRCRAFT ACCIDENT REPORT AND EXECUTIVE SUMMARY

				Reference:	CA18/2/3/8849	
Aircraft Registration	ZU-BWU	Date of Accident	12 October 2010		Time of Accident	1545Z
Type of Aircraft	Windlass Aquilla		Type of Operation		Private	
Pilot-in-command Licence Type	Private		Age	29	Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	56.3		Hours on Type	56.3	
Last point of departure	Brits Aerodrome FABS North-West Province					
Next point of intended landing	Brits Aerodrome FABS North-West Province					
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)						
Open field on farm, approximately 5nm North-West of Brits Aerodrome North-West Province.						
Meteorological Information	Surface wind; Calm, Temperature; 30°C, Visibility; + 10 km.					
Number of people on board	1 + 0	No. of people injured	0	No. of people killed	0	
Synopsis						
<p>On 12 October 2010 at approximately 1715Z, the pilot, who was the sole occupant on-board the aircraft, departed Brits Aerodrome on a private local flight with 30 litres of fuel available in the fuel tank. After flying for approximately 20 minutes at 4600' AMSL, he suddenly experienced a loss of power whilst flying over a farm. The pilot stated that he was then committed to execute an emergency landing on an open field on the farm.</p> <p>During the landing however, he lost control of the aircraft when the landing gear wheels ran over some rough terrain. The aircraft eventually flipped over onto its right hand side. The pilot sustained no injuries during the accident.</p>						
Probable Cause						
<p><i>Unsuccessful forced landing after a loss of engine power during flight.</i></p> <p><i>Contributory Cause: Fuel system contaminated.</i></p>						
IARC Date				Release Date		



AIRCRAFT ACCIDENT REPORT

Name of Owner/Operator : V.J. Hamman
Manufacturer : Solo Wings CC
Model : Windlass Aquilla
Nationality : South African
Registration Marks : ZU-BWU
Place : On farm 15 nm North-West of Brits Aerodrome
Date : 12 October 2010
Time : 1735Z

All times given in this report is Co-ordinated Universal Time (UTC) and will be denoted by (Z). South African Standard Time is UTC plus 2 hours.

Purpose of the Investigation:

*In terms of Regulation 12.03.1 of the Civil Aviation Regulations (1997) this report was compiled in the interest of the promotion of aviation safety and the reduction of the risk of aviation accidents or incidents and **not to establish legal liability.***

Disclaimer:

This report is given without prejudice to the rights of the CAA, which are reserved.

1. FACTUAL INFORMATION:

1.1 History of Flight:

- 1.1.1 On 12 October 2010 at approximately 1715Z, the pilot, who was the sole occupant on-board the aircraft, departed Brits Aerodrome on a private local flight with 30 litres of fuel available in the fuel tank. After flying for approximately 20 minutes at 4600' AMSL, he suddenly experienced a loss of power whilst flying over a farm. The pilot stated that he was then committed to execute an emergency landing on an open field on the farm.
- 1.1.2 During the landing however, he lost control of the aircraft when the landing gear wheels ran over some rough terrain. The aircraft eventually flipped over onto its right hand side.
- 1.1.3 The pilot was properly restrained with the aircraft safety harnesses and exited the aircraft without any injuries. The aircraft was recovered to an approved person (AP) at Rhino Park.
- 1.1.4 The accident occurred during day time condition outside the boundary of Brits Aerodrome.

1.2 Injuries to Persons:

Injuries	Pilot	Crew	Pass.	Other
Fatal	-	-	-	-
Serious	-	-	-	-
Minor	-	-	-	-
None	1	-	-	-

1.3 Damage to Aircraft:

1.3.1 The aircraft sustained substantial damage to the wings, spreader bar and propeller during the accident sequence.



Figure 1: View of similar Type Microlight Aquilla.

1.4 Other Damage:

1.4.1 There was no other damage caused to property on the ground.

1.5 Personnel Information:

Nationality	South African	Gender	Male	Age	29
Licence Number	0279002240	Licence Type	Private		
Licence valid	Yes	Type Endorsed	Yes		
Ratings	Nil				
Medical Expiry Date	12 June 2013				
Restrictions	None				
Previous Accidents	Nil				

Flying experience:

Total Hours	56.3
Total Past 90 Days	20.0
Total on Type Past 90 Days	20.0
Total on Type	56.3

1.6 Aircraft Information:

1.6.1 Airframe:

Type	Windlass Aquilla	
Serial Number	WA 754	
Manufacturer	Solo Wings CC	
Date of Manufacture	23 June 1999	
Total Airframe Hours (At time of Accident)	685.0	
Last Annual (Hours & Date)	669.0	30 January 2010
Hours since Last Annual	16.0	
Authority to fly (Issue Date)	04 March 2010	
C of R (Issue Date) (Present owner)	04 March 2010	
Maximum certified mass	450	
Operating Categories	NTCA	

1.6.2 Engine:

Type	Rotax 503
Serial Number	5172281
Hours since New	685.0
Hours since Overhaul	52.0

1.6.3 Propeller:

Type	Geo Killey
Serial Number	C12108
Hours since New	685.0
Hours since Overhaul	18.0

1.7 Meteorological Information:

1.7.1 The following weather information was obtained from pilot's questionnaire.

Wind direction	None	Wind speed	Calm	Visibility	10 km
Temperature	30°C	Cloud cover	Nil	Cloud base	None
Dew point	Unknown				

1.8 Aids to Navigation:

1.8.1 The aircraft was equipped with standard navigation and instruments as per manufacturer specifications. No defects were reported prior to the accident.

1.9 Communications:

1.9.1 The communication equipment was reported serviceable at the time of the accident.

1.10 Aerodrome Information:

1.10.1 The accident occurred on a farm and outside the boundaries of Brits Aerodrome.

1.11 Flight Recorders:

1.11.1 The aircraft was not fitted with a cockpit voice recorder (CVR) or a flight data recorder (FDR), nor was either required by regulations.

1.12 Wreckage and Impact Information:

1.12.1 The pilot was committed to execute an emergency landing on an open field on the farm when he experienced a loss of power. During the landing the aircraft landing gear wheels ran over some rough terrain causing the aircraft to turn over onto its right hand side. The wings, spreader bar and the propeller blades were substantially damaged.

1.13 Medical and Pathological Information:

1.13.1 None.

1.14 Fire:

1.14.1 There was no pre- or post-impact fire.

1.15 Survival Aspects:

1.15.1 The pilot was properly restrained with the aircraft safety harnesses and exited the aircraft without any injuries.

1.16 Tests and Research:

1.16.1 The aircraft and engine was recovered to an approved person (AP) at Rhino Park for further investigation. The AP concluded that the fuel system was checked and found contaminated that subsequently caused the loss of power during flight.

1.17 Organizational and Management Information:

1.17.1 This was a private flight.

1.17.2 The last Annual Inspection was carried out by an approved person (AP) of the Aero Club of SA on 30 January 2010 at a total of 669.0 airframe hours.

1.18 Additional Information:

1.18.1 Not applicable.

1.19 Useful or Effective Investigation Techniques:

1.19.1 None.

2. ANALYSIS:

- 2.1 The pilot departed Brits Aerodrome on a private local flight with 30 litres of fuel available in the fuel tank. After flying for approximately 20 minutes he suddenly experienced a loss of power and was committed to execute an emergency landing on an open field on the farm. The aircraft sustained substantial damage to the wings, spreader bar and propeller.
- 2.2 After the aircraft was recovered to an approved person (AP) it was discovered that the fuel system was contaminated and subsequently caused a loss of power on the engine.

3. CONCLUSION:

3.1 Findings:

- 3.1.1 The pilot was in possession of a valid Microlight pilot's license and valid aviation medical certificate at the time of the accident.
- 3.1.2 The pilot was a holder of a valid Microlight pilot's licence and medical certificate at the time of the accident.
- 3.1.3 The pilot departed from Brits Aerodrome on a local private flight.
- 3.1.4 The aircraft authority to fly certificate was valid at the time of the accident.
- 3.1.5 The weather was fine and the wind calm and did not contribute to the cause of the accident.

3.2 Probable Cause/s:

- 3.2.1 Unsuccessful forced landing after the engine had a loss of power during flight.

3.3 Contributory Factor:

- 3.3.1 Contaminated fuel in the fuel system caused loss of engine power.

4. SAFETY RECOMMENDATIONS:

4.1 None

5. APPENDICES:

5.1 There are no appendices to this report.

Compiled by

Date:

For: Director of Civil Aviation

Investigator-in-charge:

Date:

Co-investigator:

Date: