

## AIRCRAFT ACCIDENT REPORT AND EXECUTIVE SUMMARY

				Reference:	CA18/2/3/8518	
<b>Aircraft Registration</b>	ZU-CLN	<b>Date of Accident</b>	11 July 2008		<b>Time of Accident</b>	1500Z
<b>Type of Aircraft</b>	Windlass Aquilla (microlight)		<b>Type of Operation</b>	Private		
<b>Pilot-in-command Licence Type</b>	Private		<b>Age</b>	42	<b>Licence Valid</b>	YES
<b>Pilot-in-command Flying Experience</b>	Total Flying Hours	191.1		<b>Hours on Type</b>	191.1	
<b>Last point of departure</b>	Leeuwenboschfontein Farm-(Western Cape Province)					
<b>Next point of intended landing</b>	Ladysmith (FALY)-(Kwa Zulu Natal Province)					
<b>Location of the accident site with reference to easily defined geographical points (GPS readings if possible)</b>						
Leeuwenboschfontein Farm(GPS Position: S 33°33'00 E020°00'00)						
<b>Meteorological Information</b>	Surface wind: 135°/5kts, Temperature: 17°C, Visibility: 10km					
<b>Number of people on board</b>	1 + 1	<b>No. of people injured</b>	2	<b>No. of people killed</b>	0	
<b>Synopsis</b>	<p>The microlight aircraft with two occupants landed at Leeuwenboschfontein Farm for refuelling purposes. The aircraft had taken off from Morning Star airfield and was enroute to Ladysmith(FALY). After refuelling the aircraft took off in a westerly direction making a left turn towards Ladysmith. During the left turn just after getting airborne the aircraft collided with a telephone pole and impacted rocky terrain.</p> <p>Both occupants sustained serious injuries and the microlight was destroyed.</p>					
<b>Probable Cause</b>						
The pilot made a premature left hand turn after take off which resulted in the aircraft colliding with the power lines.						
IARC Date				Release Date		



## AIRCRAFT ACCIDENT REPORT

**Name of Owner/Operator** : Keith J. Benkestein  
**Manufacturer** : Solo Wings CC  
**Model** : Windlass Aquilla  
**Nationality** : South African  
**Registration Marks** : ZU-CLN  
**Place** : Leeuwenboschfontein  
**Date** : 11 July 2008  
**Time** : 0500 Z

*All times given in this report are 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. At 1210Z the pilot accompanied by the passenger took off from Morning Star Aerodrome on a flight to Ladysmith Aerodrome (FALY). The flight was conducted under day VFR conditions. The altitude selected for the flight was 3000 feet AMSL.
- 1.1.2. At approximately 1410Z the pilot landed at Leeuwenboschfontein for refuelling the aircraft.
- 1.1.3. At 1500Z, the pilot accompanied by the passenger took off in a westerly direction with the intention of making a left hand turn towards Ladysmith. During the left hand turn the aircraft could not sustain any climb, but rather descended and resulted in the left hand main gear to collide with a telephone pole. The aircraft crashed into rocky terrain.
- 1.1.4. Both the pilot and passenger were seriously injured and were taken to the local hospital in Montagu area. The pilot was then transferred to Durbanville hospital in Cape Town. The passenger was then transferred to a hospital in Worcester.
- 1.1.5 The aircraft was destroyed in the accident sequence.

## 1.2 Injuries to Persons

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

## 1.3 Damage to Aircraft

1.3.1 The aircraft was destroyed in the accident.

## 1.4 Other Damage

1.4.1 Damages were limited to the top of the telephone pole.

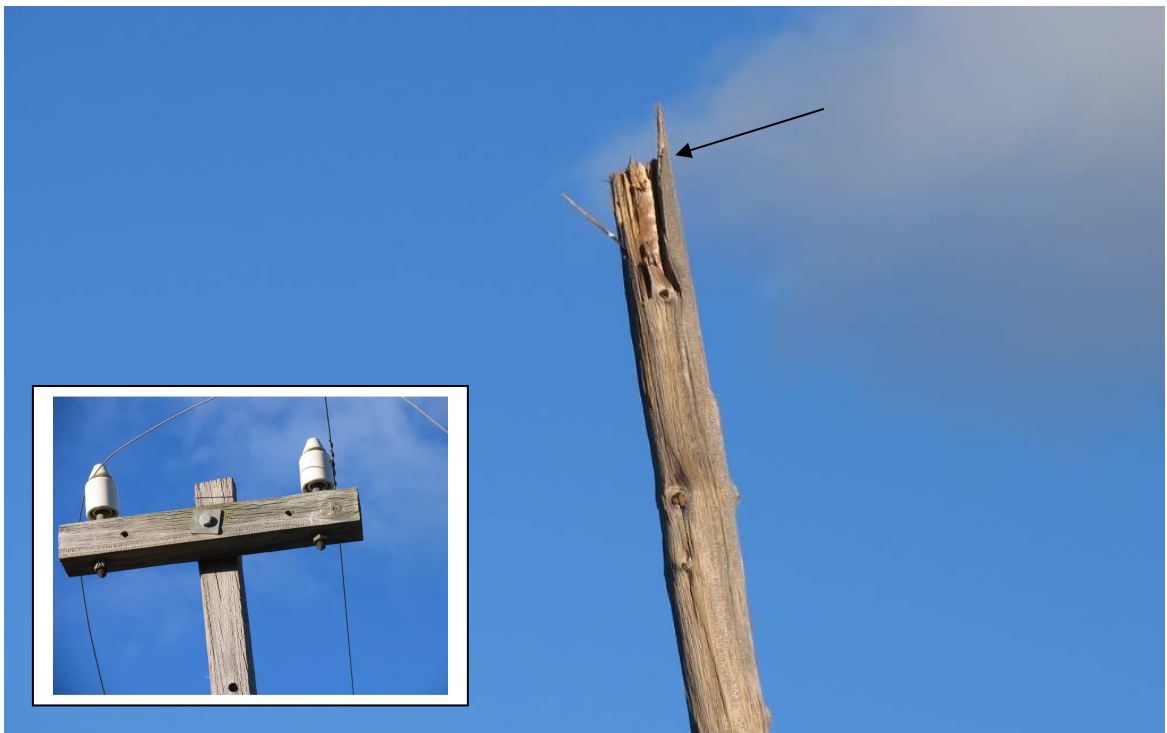


Figure 1: Damaged telephone pole  
Insert: Picture of an existing pole

## 1.5 Personnel Information

Nationality	South African	Gender	Male	Age	42
Licence Number	*****	Licence Type	Private		
Licence valid	Yes	Type Endorsed	Yes		
Ratings	Nil				
Medical Expiry Date	31 May 2010				
Restrictions	Nil				
Previous Accidents	Nil				

Flying Experience:

Total Hours	191.1
Total Past 90 Days	50
Total on Type Past 90 Days	50
Total on Type	191.1

## 1.6 Aircraft Information

**Airframe:**

Type	Windlass Aquilla	
Serial Number	WA 916	
Manufacturer	Solo Wings CC	
Date of Manufacture	2001	
Total Airframe Hours (At time of Accident)	280	
Last Annual Inspection (Date & Hours)	15 March 2008	231.Hours
Hours since Last MPI	49	
Authority to Fly (Issue Date)	15 November 2009	
C of R (Issue Date) (Present owner)	30 May 2005	
Operating Categories	Private	

**Engine:**

Type	Rotax 503
Serial Number	M5418896
Hours since New	280
Hours since Overhaul	TBO not yet reached

**Propeller:**

Type	Warp
Serial Number	Not applicable
Hours since New	62
Hours since Overhaul	TBO not yet reached

## 1.7 Meteorological Information

1.7.1 The following weather report was obtained from the pilot's questionnaires:

Wind direction	NW	Wind speed	8KNOTS	Visibility	9999
Temperature	18°C	Cloud cover	Scattered	Cloud base	3000ft
Dew point	Unknown				

## 1.8 Aids to Navigation

1.8.1 The aircraft was equipped with standard navigational equipment as per equipment list approved by the regulator. There were no recorded defects to navigational equipments prior to the flight.

## 1.9 Communications.

- 1.9.1. The aircraft was equipped with the standard communication equipment as per equipment list approved by the regulator. There were recorded defects to the communication equipment prior to the flight.
- 1.9.2 The pilot made all radio transmissions on 124.8 MHz

## 1.10 Aerodrome Information

- 1.10.1 The aircraft crashed on a rocky terrain next to the Leeuwenboshfontein Farm aerodrome.

## 1.11 Flight Recorders

- 1.11.1 The aircraft was not fitted with a flight data recorder (FDR) or cockpit voice recorder (CVR) nor was it required by the regulator.

## 1.12 Wreckage and Impact Information

- 1.12.1 During a left hand turn the aircraft collided with a telephone pole resulting in the left main gear breaking off. The aircraft subsequently crashed onto rocky terrain.



Photo 3: View of wreckage (canopy/wings) from above



Photo 4: Seats and engine underneath canopy

### **1.13 Medical and Pathological Information**

1.13.1 The pilot and passenger were seriously injured in the accident and were taken to the local hospital.

1.13.2 The passenger sustained serious leg and arm injuries and was later transferred to a hospital in Worcester where he underwent operational procedures.

1.13.3 The pilot sustained serious head injuries and was later transferred to a hospital in Durbanville in Cape Town, where he went underwent an emergency operation.

### **1.14 Fire**

1.14.1. There was no evidence of in-flight or post impact fire.

### **1.15 Survival Aspects**

1.15.1 Both occupants were seriously injured in the accident sequence. The aircraft frame was severely damaged.

1.15.2 At the time of impact both occupants of the aircraft were properly restrained by seat belts and thus prevented from being thrown overboard, which could have resulted in much more serious injuries than the ones sustained, or could even have resulted in death.

1.15.3 All the above render this as a survivable accident.

## **1.16 Tests and Research**

1.16.1 After the accident, the wreckage was taken to Morningstar airfield near Cape Town for further investigations. The engine was secured by nylon ropes and tested to check if there was any defect that could have indicated an engine failure. The engine started and ran satisfactory.

## **1.17 Organizational and Management Information**

1.17.1 The accident aircraft was privately owned and it was flown by the owner at the time of the accident.

1.17.2 According to the available records the aircraft was maintained by an approved person. The last annual inspection was carried out on the 15 March 2008. The aircraft had a valid authority to fly with an expiry date of the 15 March 2009.

## **1.18 Additional Information**

1.18.1 N/A

## **1.19 Useful or Effective Investigation Techniques**

1.19.1 None.

## **2. ANALYSIS**

2.1 The engine was tested and found to be of no factor to this accident.

2.2 The pilot accompanied by the passenger took off from Morning Star Aerodrome on a flight to Ladysmith Aerodrome (FALY). The flight was conducted under day VFR conditions.

2.3 The pilot landed at Leeuwenboschfontein to refuel the aircraft. After refuelling the aircraft they took off in a westerly direction with the intention of making a left hand turn out towards the destination (Ladysmith).

2.4 After take-off the aircraft could not gain sufficient height to clear the telephone lines which was on the flight path. This resulted in the left main gear colliding with the telephone pole.

2.5 The position of the airstrip and the prevailing winds created a potential for the creation of rotor streams, and the resulting turbulence hampering the ability of the aircraft to gain sufficient altitude.

2.6 With the aircraft struggling to gain altitude the pilot aggravated the situation by entering into a left turn pre-maturely, which resulted in the aircraft colliding with the

telephone pole.

### **3. CONCLUSION**

#### **3.1 Findings**

- 3.1 The pilot was a holder of a valid microlight pilot licence which was valid until 28 May 2010.
- 3.2 The pilot medical certificate was valid until the 20 April 2010.
- 3.3 The aircraft was issued with a Certificate of Registration and had a valid Authority to Fly.
- 3.4 The engine was tested and ran satisfactory after the accident.
- 3.5 The landing strip where the aircraft took off is situated in a valley between hills

#### **3.2 Probable Cause/s**

3.2.1 The pilot made a pre mature left turn after take off which resulted in the aircraft colliding with the power lines.

### **4. SAFETY RECOMMENDATIONS**

- 4.1 None.

### **5. APPENDICES**

- 5.1 None

Compiled by: Percy Mngqibisa

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**For: Director of Civil Aviation**

Date: .....

Investigator-in-charge: .....

Date: .....

Co-Investigator: .....

Date: .....