# SOUTH AFRICAN

# AIRCRAFT ACCIDENT REPORT AND EXECUTIVE SUMMARY

Form Number: CA 12-12a

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					Reference:	CA18/2/3	3/8048
Aircraft Registration	ZU-DWE	3	Date of Accident	12 [	December 2005	Time of Accident	1630Z
Type of Aircraft	TL-2000 S	STING	G	Type Opera		Private	·
Pilot-in-command L	icence Typ	е	Private	Age	55	Licence Valid	Yes
Pilot-in-command Flying Experience			Total Flying Hours	-	133.25	Hours on Type	Unknown
Last point of departure FASC (Secunda); S26°31.4' E029°10.2', elevation 5250ft AMSL			AMSL				
Next point of intended   Private landing		ate landing strip, 22	2km No	orth of FAS(	0		
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)			6				
Near FASC (Secunda), approximately 11km North of Secunda in a farmland at a GPS position S26°26.463' E029°02.014' at an elevation of 5081ft AMSL				on			
Meteorological Information	Fin	Fine weather conditions was reported at the time of the accident.			nt.		
Number of people o board	n	1+1	No. of people injured			lo. of people illed	1+1
Synopsis							

The pilot, accompanied by a passenger, took off on a private flight from Secunda Aerodrome to a private aerodrome on a farm, 22 km north of Secunda Aerodrome. At 1630Z the aircraft crashed at a GPS position of S 26° 26.463" and E029° 02.014" at an elevation of 5081 ft AMSL in an open farm field, approximately 11km north of Secunda Aerodrome under unknown conditions.

Investigation revealed that the aircraft appeared to have been in a spin manoeuvre from which the pilot was unable to recover and impacted the terrain in a flat attitude.

Both occupants sustained fatal injuries and the aircraft was substantially damaged during the accident sequence.

Fine weather conditions were reported at the time of the accident.

The pilot was correctly licensed to conduct the flight and held a valid medical certificate without any restrictions.

According to CAA records the aircraft was correctly maintained.

Examination of the engine revealed no mechanical reason(s) that may have caused the engine to malfunction.

#### **Probable Cause**

The aircraft appeared to have been in a spin manoeuvre from which the pilot was unable to recover and impacted the terrain in a flat attitude.

IARC Date	Release Date	

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**AUTHORITY** 

Form Number: CA 12-12a E-mail address of originator: thwalag@caa.co.za

# AIRCRAFT ACCIDENT REPORT

Name of Owner/Operator : Himari Eiendomme (Pty) Ltd

Manufacturer : TL Ultralight Model : TL-2000 Sting **Nationality** : South Africa **Registration Marks** : ZU-DWB

**Place** 11 km North of Secunda Aerodrome

Date **:** 12 December 2005

Time : 1630Z

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 interests 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 December 2005 at approximately 1620Z, the pilot accompanied by a passenger, took off on a private flight from Secunda Aerodrome to a private aerodrome on a farm, 22 km north of Secunda Aerodrome.
- 1.1.2 At 1630Z the aircraft crashed in an open farm field, approximately 11km north of Secunda Aerodrome.
- 1.1.3 Fine weather conditions were reported at the time of the accident.
- 1.1.4 Both occupants sustained fatal injuries and the aircraft was substantially damaged during the accident sequence.

#### 1.2 **Injuries to Persons**

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

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# 1.3 Damage to Aircraft

1.3.1 The aircraft was substantially damaged during the accident sequence.

# 1.4 Other Damage

1.4.1 There was no other reported damage.

# 1.5 Personnel Information

Nationality		South African			
RSA Licence	Yes	Gender	Male	Age	55
Licence valid		Yes	Type Endorsed	Yes	
Ratings		Nil			
Medical Expiry Date		23 March 2006			
Restrictions		Nil			

# 1.5.2 Flying Experience:

1.5.2.1 The pilot's personal logbook was not located. According to information obtained from the SACAA (Civil Aviation Authority) pilot's file, his experience comprised the following as on 17 April 2005 when he renewed his licence.

Total Hours	133.25
Total Last year	33.40
Total Past 90 Days	Unknown
Total on Type Past 90 Days	Unknown
Total on Type	Unknown

# 1.6 Aircraft Information

# Airframe:

Туре	TL-2000 Sting	
Serial #	05 ST 111	
Manufacturer	TL Ultralight	
Year of Manufacture	2005	
Total Airframe Hours (At time of Accident)	Unknown	
Last Annual Inspection (Date & Hours)	17 May 2005 0 (New)	
Hours since Last Annual Inspection	Unknown	
Proofing Flight Authority to Fly (Issue date)	15 July 2005	
C of R (Issue Date)	15 July 2005	

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# **Engine:**

Туре	Rotax 912 S
Ser#	5644602
Hours since New	2
Hours since Overhaul (17 May 2005 at Annual Inspection)	2

# **Propeller:**

Туре	Woodcomp 3 bladed, electrical variable pitch
Ser #	E525
Hours since New	2
Hours since Overhaul (17 May 2005 at Annual Inspection)	2

# 1.7 Meteorological Information

1.7.1 Fine weather conditions were reported at the time of the accident.

# 1.8 Aids to Navigation

1.8.1 The aircraft was equipped with standard navigational equipment for the aircraft type and no defects were reported prior to the flight.

# 1.9 Communications.

1.9.1 The aircraft was equipped with standard communication equipment for the aircraft type and no defects were reported prior to the flight.

### 1.10 Aerodrome Information

1.10.1 The accident did not happen at an aerodrome. However, the aircraft took off from Secunda Aerodrome.

Aerodrome Location	Secunda
Aerodrome Co-ordinates	S26º 31.4' E029º 10.2'
Aerodrome Elevation	5250'
Runway Designations	11/29
Runway Dimensions	1100m (3609') x 18m
Runway Used	Unknown
Runway Surface	Tar
Approach Facilities	None

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### 1.11 Flight Recorders

1.11.1 The aircraft was not equipped with a FDR (Flight Data Recorder) or a CVR (Cockpit Voice Recorder) nor was it required by the regulations.

### 1.12 Wreckage and Impact Information

- 1.12.1 The accident occurred during daytime in the Secunda district, at a GPS position of S 26° 26.463" and E029° 02.014" at an elevation of 5081 ft AMSL.
- 1.12.2 Investigation revealed that the aircraft appeared to have been in a spin maneuver from which the pilot was unable to recover and impacted the terrain in a flat attitude.

### 1.13 Medical and Pathological Information

- 1.13.1 According to the Medico-Legal Post-Mortem Examination the cause of death of the pilot was as a result of multiple blunt force injuries involving the head, chest, limbs and spine.
- 1.13.2 No Forensic Chemistry Laboratory test results were available at the time of compiling this report.

#### 1.14 Fire

1.14.1 There was no evidence of a pre or post impact fire.

# 1.15 Survival Aspects

1.15.1 The cause of death suggested that the impact forces were very high and therefore the accident was considered not survivable.

#### 1.16 Tests and Research.

- 1.16.1 Engine examination:
- 1.16.1.1 The engine was recovered to an approved facility where it was examined for possible indications of malfunctioning. No mechanical reasons could be identified that may have caused the engine to malfunction.

#### 1.17 Organisational and Management Information

1.17.1 This was a private flight.

#### 1.18 Additional Information

1.18.1 None.

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### 1.19 Useful or Effective Investigation Techniques

#### 1.19.1 None

### 2. ANALYSIS

- 2.1 The pilot, accompanied by a passenger, took off on a private flight from Secunda Aerodrome to a private aerodrome on a farm, 22 km north of Secunda Aerodrome. At 1630Z the aircraft crashed at a GPS position of S 26° 26.463" and E029° 02.014" at an elevation of 5081 ft AMSL in an open farm field, approximately 11km north of Secunda Aerodrome under unknown conditions. Investigation revealed that the aircraft appeared to have been in a spin manoeuvre from which the pilot was unable to recover and impacted the terrain in a flat attitude.
- 2.2 Both occupants sustained fatal injuries and the aircraft was substantially damaged during the accident sequence.
- 2.3 Fine weather conditions were reported at the time of the accident.
- 2.4 The pilot was correctly licensed to conduct the flight and held a valid medical certificate without any restrictions.
- 2.5 According to CAA records the aircraft was correctly maintained.
- 2.6 Examination of the engine revealed no mechanical reason(s) that may have caused the engine to malfunction.

#### 3. CONCLUSIONS

# 3.1 Findings

- 3.1.1 The pilot, accompanied by a passenger, took off on a private flight from Secunda Aerodrome to a private aerodrome on a farm, 22 km north of Secunda Aerodrome. At 1630Z the aircraft crashed at a GPS position of S 26° 26.463" and E029° 02.014" at an elevation of 5081 ft AMSL in an open farm field, approximately 11km north of Secunda Aerodrome under unknown conditions.
- 3.1.2 Investigation revealed that the aircraft appeared to have been in a spin manoeuvre from which the pilot was unable to recover and impacted the terrain in a flat attitude.
- 3.1.3 Both occupants sustained fatal injuries and the aircraft was substantially damaged during the accident sequence.
- 3.1.4 Fine weather conditions were reported at the time of the accident.
- 3.1.5 The pilot was correctly licensed to conduct the flight and held a valid medical certificate without any restrictions.

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- 3.1.6 According to CAA records the aircraft was correctly maintained.
- 3.1.7 Examination of the engine revealed no mechanical reason(s) that may have caused the engine to malfunction.

# 3.2 Probable Cause/s

3.2.1 The aircraft appeared to have been in a spin manoeuvre from which the pilot was unable to recover and impacted the terrain in a flat attitude.

# 4. SAFETY RECOMMENDATIONS

4.1 None

Submitted through the office of the SM for the Panel, November 2009.