



<b>SHORT REPORT AND EXECUTIVE SUMMARY</b>
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				Reference:	CA18/2/3/9609	
<b>Aircraft Registration</b>	ZU-TMG	<b>Date of Accident</b>	16 March 2017		<b>Time of Accident</b>	1200Z
<b>Type of Aircraft</b>	PAPA 51 Thunder Mustang		<b>Type of Operation</b>	Private (Part 94)		
<b>Pilot-in-command Licence Type</b>		Airline Transport	<b>Age</b>	54	<b>Licence Valid</b>	Yes
<b>Pilot-in-command Flying Experience</b>			16 662	<b>Hours on Type</b>	50,2	
<b>Last point of departure</b>		Stellenbosch Aerodrome (FASH): Western Cape Province				
<b>Next point of intended landing</b>		Stellenbosch Aerodrome (FASH): Western Cape Province				
<b>Location of the accident site with reference to easily defined geographical points (GPS readings if possible)</b>						
Kogel Bay (GPS S 34° 14' 08.27" E 018° 50' 59.69") Elevation 10 feet						
<b>Meteorological Information</b>		Wind Calm ; Visibility: CAVOK; Temperature: 24 °C, dew point 8 °C				
<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 pilot and a passenger departed from Stellenbosch airfield on a private flight. The pilot reported that they planned to route to Betty's Bay and then back to Stellenbosch. While passing Kogel Bay, he heard the engine sound change. As he scanned the engine instruments, he saw that the oil pressure was dropping and the engine stopped. The pilot reported that he started a climb and a right-hand turn. After completing the 180° turn he opted to execute a forced landing on the beach. The undercarriage was not lowered and the aircraft skidded on the beach on its belly before coming to rest.</p> <p>The aircraft sustained substantial damage.</p> <p>Investigation revealed that the loss of oil pressure was caused by a ruptured oil line which caused all oil to leak and the engine seized due to lack of lubrication.</p>						
<b>Probable Cause</b>						
<p>Unsuccessful forced landing following an inflight engine failure as a result of a failed oil supply pipe.</p>						
<b>SRP Date</b>	12 September 2017		<b>Release Date</b>	20 September 2017		

<b>AIRCRAFT ACCIDENT REPORT</b>
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**Name of Owner /Operator** : A J Basson  
**Manufacturer** : Thunder Mustang LLC  
**Model** : PAPA 51 Thunder Mustang  
**Nationality** : South African  
**Registration Marks** : ZU-TMG  
**Place** : Kogel Bay  
**Date** : 16 March 2017  
**Time** : 12:00Z

*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 (2011) 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 blame or liability.***

### **Disclaimer:**

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

## **1. FACTUAL INFORMATION**

### **1.1 History of Flight**

1.1.1 The pilot and a passenger departed from Stellenbosch airfield on a private flight. The pilot reported that they planned to route to Betty's Bay and then back to Stellenbosch. Take-off and climb were uneventful. While passing Kogel Bay in a northerly direction at 400 feet AGL, the pilot heard the engine sound change. He scanned the engine instruments and saw that the oil pressure was indicating 15 psi and dropping. Within eight seconds the engine seized.

- 1.1.2 The pilot reported that he started a climb and right hand turn. After completing the 180° turn he opted to execute a forced landing on the beach. The undercarriage was not lowered and the aircraft skidded on the beach on its belly before coming to rest.
- 1.1.3 The pilot reported that while exiting the aircraft he bumped his head against the canopy and sustained a cut on his forehead. The passenger sustained a cut below his kneecap. The aircraft sustained substantial damage to the propeller, engine cowls, lower wing and bottom air intake scoop.

## **1.2 The investigation revealed the following:**

### **Pilot**

- 1.2.1 The pilot's licence was valid from 27 January 2009 to 26 January 2019 and his aviation medical certificate would expire on 31 May 2017.
- 1.2.2 His licence had corrective lenses restriction.

### **Aircraft**

- 1.2.3 The aircraft was manufactured by Thunder Mustang LLC.
- 1.2.4 The aircraft had a total of 55 airframe hours at the time of the accident.
- 1.2.5 The last annual inspection on the aircraft was carried out on 8 August 2016 at 40,6 hours and it had flown 14,4 hours since the last inspection.
- 1.2.6 The Falconer V12 engine (SN RFI 12050) had accumulated 53,2 hours since new.
- 1.2.7 The MTV-16-1-E-C propeller (SN 98447) had accumulated 55 hours since new.
- 1.2.8 The coolant system was operating normally.
- 1.2.9 Loss of oil pressure followed by engine seizure.
- 1.2.10 There was a ruptured oil line that caused all oil to leak out; as a result the engine seized.



Figure 1: View of the aircraft after it came to rest

## **2. CONCLUSION**

### **2.1 Probable Cause/s**

2.1.1 Unsuccessful forced landing following an inflight engine failure as a result of a failed oil supply pipe.

## **3. SAFETY RECOMMENDATIONS**

3.1 None

## **4. APPENDICES**

4.1 None