SOUTH AFRICAN CIVIL AVIATION AUTHORITY

Section/division **Accident and Incident Investigations Division** Form Number: CA 12-57

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10497						
Classification	Accident	**Date**	6 May 2024		**Time**	0700Z	
Type of Operation	Private (Part 94)						
Location							
Place of Departure	Pietermaritzburg Airport (FAPM), KwaZulu-Natal Province	Place of Intended Landing	Pietermaritzburg Airport (FAPM), KwaZulu-Natal Province				
Place of Occurrence	Runway 16 at Pietermaritzburg Airport (FAPM)						
GPS Co-ordinates	Latitude	29°38'42.63"S	Longitude	30°23'43.85"E	Elevation	2 423ft	
Aircraft Information							
Registration	ZU-WES						
Make; Model; S/N	Sling Aircraft Factory, Sling 2 LSA (Serial Number: 061)						
Damage to Aircraft	Minor	Total Aircraft Hours	2 444.0				
Pilot-in-command							
Licence Type	Private Pilot Licence (PPL)	Gender	Male	Age	25		
Licence Valid	Yes	Total Hours	90.6	Total Hours on Type	4.2		
Total Hours 30 Days	1.6	Total Flying on Type Past 90 Days	4.2				
People On-board	1+1	**Injuries**	0	**Fatalities**	0	**Other (on the ground)**	0

What Happened

On Monday, 6 May 2024, a pilot and a passenger on-board a Sling 2 LSA aircraft with registration ZU-WES were on a private flight from Pietermaritzburg Aerodrome (FAPM) in KwaZulu-Natal province with the intention to land back at the same aerodrome. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 94 of the Civil Aviation Regulations (CAR) 2011 as amended.

The pilot stated that he conducted the pre-flight checks and no anomalies were found. He then took off from FAPM to the local general flying area (GFA) for an hour-building flight; the flight was uneventful. Upon his return to FAPM, the aircraft's speed on approach for Runway 16 was approximately 70 knots (kts). The aircraft landed hard with the nose wheel first, followed by the main wheels; the propeller struck the ground due to the aircraft landing nose wheel first. The right main wheel fairing also separated during landing. The aircraft veered off to the right and came to a stop on the grass area facing west. The aircraft sustained minor damage. The pilot and the passenger vacated the aircraft unscathed.

The accident occurred during daylight at Global Positioning System (GPS) co-ordinates determined to be 29°38'42.63"South 30°23'43.85"East, at an elevation of 2 423 feet (ft).

Figure 1: Aerial view of FAPM, the landing direction, and the accident site. (Source: Google Earth)

Figure 2: ZU-WES after recovery with the right main wheel fairing missing. (Source: Operator)

Figure 3: The separated right main landing wheel fairing. (Source: Operator)

Figure 4: The damage on the propeller blade tips. (Source: Operator)

Normal Landing (Source: Sling 2 LSA Pilot Operating Handbook)

Aircraft component	Action
1. Throttle	*As required*
2. Controls	*Flare to minimum flying speed, touch-down on main wheels.*
3. Nose wheel	*Gently lower to the ground*
4. Apply brakes	*As required (after the nose wheel touch-down)*

Weather Information

The weather information in the table below was issued by the South African Weather Service (SAWS) for FAPM on 6 May 2024.

FAPM *60700Z 0300KT 200V320 CAVOK 17/M11 Q1027 NOSIG=*

Wind Direction	030°	Wind Speed	2kts	Visibility	9999m
Temperature	17°C	Cloud Cover	Nil	Cloud Base	Nil
Dew Point	11°C	QNH	1027hPa		

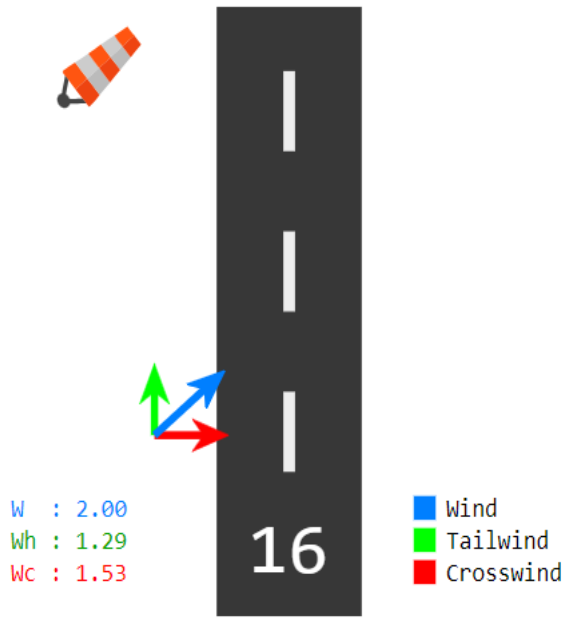

Figure 5: The crosswind component as per the weather report. (Source: https://e6bx.com)

- The weather profile indicates constant wind speed at the time of landing, and no low-level wind shear turbulence.
- The crosswind component for the Sling 2 LSA is 15 knots (kts). The crosswind component refers to the maximum crosswind velocity an aircraft can effectively withstand during take-off and landing.

Findings

Student Pilot

1) The pilot was initially issued a Private Pilot Licence (PPL) on 15 February 2021. The pilot's licence was reissued on 1 August 2022 with an expiry date of 31 August 2024. The aircraft type was endorsed on the pilot's licence. A Class 2 medical certificate was issued to the pilot on 20 April 2021 with an expiry date of 31 March 2026. The pilot was qualified to conduct the flight.

Aircraft

2) The aircraft's Certificate of Registration (C of R) was issued to the current owner on 7 December 2018. The Authority to Fly (ATF) was initially issued on 23 June 2018. The latest ATF was issued on 12 June 2023 with an expiry date of 30 June 2024.

3) The last annual inspection of the aircraft was certified on 21 March 2024 at 2 400.0 total airframe hours. At the time of the flight, the aircraft had a total of 2 444.0 airframe hours. The aircraft was flown a further 44.0 hours since the last annual inspection.

4) The aircraft was issued a Certificate of Release to Service (CRS) on 21 March 2024 at 2 400.0 airframe hours with an expiry date of 22 March 2025 or at 2 544.0 airframe hours, whichever occurs first.

5) No defects were recorded in the flight folio at the time of the flight.

6) Neither the weather nor the runway was a factor in this accident.

Probable Cause(s)

Unstable approach which resulted in the aircraft landing hard with the nose wheel first, followed by the main wheels; consequently, the right main wheel fairing separated and the propeller struck the ground.

Contributing Factor(s)

Poor landing technique.

Safety Action(s)
None.
Safety Message and/or Safety Recommendation/s
Pilots are encouraged to conduct a go-around if the approach is unstable.
About this Report
The decision to conduct a limited investigate is based on factors including whether the cause is known and the evidence supporting the cause is clear, the level of safety benefit likely to be obtained from an investigation and that will determine the scope of an investigation. For this occurrence, a limited investigation has been conducted, and the Accident and Incident Investigations Division (AIID) has relied on the information submitted by the affected person/s and organisation/s to compile this limited report. The report has been compiled using information supplied in the initial notification, as well as from follow-up desk top enquiries to bring awareness of potential safety issues to the industry in respect of this occurrence, as well as possible safety action/s that the industry might want to consider in preventing a recurrence of a similar occurrence. *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
In terms of Regulation 12.03.1 of the Civil Aviation Regulations (CAR) 2011 and ICAO Annex 13, 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 apportion blame or liability.
Disclaimer
This report is produced without prejudice to the rights of the AIID, which are reserved.

This report is issued by:
Accident and Incident Investigations Division
South African Civil Aviation Authority
Republic of South Africa