

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/3/2/1476					
Classification	Serious Incident	Date	26 April 2025		Time	1110Z
Type of Operation	Private (Part 91)					
Location						
Place of Departure	Virginia Aerodrome (FAVG), KwaZulu-Natal Province		Place of Intended Landing	King Phalo Aerodrome (FAEL), Eastern Cape Province		
Place of Occurrence	King Phalo Aerodrome Runway 11					
GPS Co-ordinates	Latitude	33° 02'11.43" S	Longitude	027° 49'07.44" E	Elevation	404 ft
Aircraft Information						
Registration	ZU-STG					
Make; Model; S/N	Sling 2 (Serial Number: 294)					
Damage to Aircraft	Minor		Total Aircraft Hours	2116.7		
Pilot-in-command						
Licence Type	Private Pilot Licence (PPL)		Gender	Female		Age 24
Licence Valid	Yes		Total Hours	117		Total Hours on Type 22.5
Total Hours 30 Days	4		Total Flying on Type Past 90 Days	4		
People On-board	1+0		Injuries	0		Fatalities 0
						Other (on ground) 0
What Happened						
<p>On Saturday, 26 April 2025, a pilot on-board a Sling 2 aircraft with registration ZU-STG took off from Virginia Aerodrome (FAVG) in KwaZulu-Natal province to King Phalo Aerodrome (FAEL) in Eastern Cape province. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 91 of the Civil Aviation Regulations (CAR) 2011 as amended.</p> <p>The pilot had planned a solo cross-country navigational flight from FAVG to East London Aerodrome (FAEL) in East London, Mossel Bay Aerodrome (FAMO) in Western Cape, and back to FAVG. This was the pilot's first visit to FAEL and FAMO. During the first leg from FAVG to FAEL, the pilot received landing clearance for Runway 11 from the air traffic control (ATC) personnel. The surface wind was 9 knots (kts) at 060°. Upon joining the aerodrome traffic circuit, the pilot extended the downwind leg to maintain separation from another aircraft that was on final approach.</p> <p>Upon turning base leg and on final approach for Runway 11, the pilot thought the aircraft was below the desired glide slope and she initiated a corrective power whilst aiming to maintain an approach speed of approximately 70kts. During the landing flare, the pilot reduced the engine power to idle. The aircraft touched down hard and bounced a few times before it came to a stop on the runway. During the landing sequence, the aircraft's propeller impacted the runway. The aircraft sustained</p>						

minor damage to the lower nose landing gear wheel support bracket, which bent to the right; the propeller tips; and the left-wing tip. The pilot was not injured.



Figure 1: The aircraft as it came to a full stop. (Source: Operator)



Figure 2: Damage to the nose landing gear wheel support bracket.



Figure 3: Damage to the propeller.



The runway scrape marks attributed to the left-wing tip damage.

Figure 4: Damage to the left-wing tip.

Aircraft Description (Source: Pilot's Operating Handbook)

The Sling 2 is a two-seat, single-engine, light sport aircraft (LSA) tricycle gear aluminum with a conventional low wing design. The aircraft is intended mainly for recreational and cross-country flying. It is also considered suitable for trainer aircraft.

Approach and Landing Procedure

Approach speed

- Long finals - 65 KIAS
- Short finals - 60 KIAS

1. Throttle - As needed
2. Wing flaps - Extend as needed
3. Trim - As needed

Landing

Before landing:

1. Throttle - As needed
2. Airspeed - 60 KIAS
3. Wing flaps - Extend as needed
4. Trim - As needed

Note: CAUTION

It is not advisable to reduce the engine throttle control lever to minimum on final approach and when descending from a very high altitude. In such cases, the engine becomes over-cooled, and a loss of power may occur. Descent at increased idle (approx. 3000 rpm), speed between 65-76 knots (75-87 mph, 120-140 km/h), and check that the engine instruments indicate values within permitted limits.

Findings

Man

1. The pilot had a Private Pilot Licence (PPL) that was initially issued by the Regulator (SACAA) on 3 July 2023. The renewed licence was issued on 18 September 2024 with an expiry date of 31 July 2026. Her Class 2 aviation medical certificate was issued on 15 September 2024 with an expiry date of 15 September 2026 with no restrictions.
2. The aircraft type was endorsed on the pilot's licence. The pilot had a total of 117 hours of which 22.5 hours were on the aircraft type.
3. The pilot was conducting her first solo cross-country to unfamiliar aerodromes, which introduced operational and situational stress. The extended downwind leg, whilst appropriate for spacing, added complexity and altered the normal descent profile.

Machine

4. The aircraft had a valid Authority-to-fly (ATF) Certificate that was issued by the Regulator on 6 July 2024 with an expiry date of 31 August 2025. The aircraft's Certificate of Registration (C of R) was issued to the current owner on 5 November 2019.
5. The last annual inspection of the aircraft was conducted on 6 March 2025 at 2099.9 airframe hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 5 March 2026 or at 2199.9 airframe hours, whichever comes first. The aircraft had a total of 2116.7 airframe hours at the time of the accident; it had accrued 16.8 hours since the last annual inspection. The aircraft was certified and serviceable at the time of the flight. No mechanical failures contributed to the accident.
6. The aircraft maintenance organisation (AMO) which conducted the mandatory periodic inspection of the aircraft had an AMO Certificate that was issued on 4 November 2024 with an expiry date of 31 October 2025. The aircraft type was endorsed on the AMO's operational specifications.
7. The aircraft was operated under the approved training organisation (ATO). The ATO had an ATO Certificate that was issued by the Regulator on 30 June 2021 with an expiry date of 30 June 2026.

Environment

8. Clear weather conditions prevailed at the time of the flight; the weather did not contribute to this accident.
9. The approach speed of 70kts exceeded the recommended range of 65kts for an extended downwind leg and may have contributed to a higher-than-normal flare.
10. Incorrect airspeed management and an unfamiliar aerodrome led to a misjudged landing flare and a hard landing.

11. Improper power management resulted in an increased rate of descent and multiple bounces after landing; the aircraft sustained damage to the propeller, nose landing gear wheel bracket and left-wing tip.
Probable Cause(s)
Improper power management resulted in an increased rate of descent and multiple bounces after landing.
Contributing Factor(s)
<ul style="list-style-type: none"> • The pilot's limited experience on the type. • Unfamiliarity with the destination aerodrome. • Deviation from the recommended approach speed as defined in the POH • Increased workload due to an extended downwind leg.
Safety Action(s)
None.
Safety Message
The approved training organisation (ATO) should introduce staged solo approvals for pilots accumulating hours towards their commercial pilot licences, starting with dual instruction or remote supervision for flights to unfamiliar aerodromes. Each flight should be followed by a structured debrief to review the pilot's approach, landing, speed control and decision-making.
About this Report
<p><i>The decision to conduct a limited investigation 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 desktop 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.</i></p> <p><i>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.</i></p>
Purpose
<i>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.</i>
Disclaimer
<i>This report is produced without prejudice to the rights of the AIID, which are reserved.</i>

This report is issued by:

**Accident and Incident Investigations Division
South African Civil Aviation Authority
Republic of South Africa**