

Section/division Accident and Incident Investigations Division

Form Number: CA 12-57

# LIMITED OCCURRENCE INVESTIGATION REPORT - FINAL

Reference Number	CA18/2/3/10457														
Classification		Accident			Dat	<b>e</b> 27	27 May 2024			Т	<b>Time</b> 0848Z		3Z		
Type of Operation Training (Part 141)															
Location															
Place of Departure	Virginia Aerodrome (FA\ e KwaZulu-Natal Province			),	Place of Intended Landing				Virginia Aerodrome (FAVG) KwaZulu-Natal Province						
Place of Occurrence Runway 23 Virginia Aerodrome															
GPS Co-ordi	PS Co-ordinates Latitude 29°46'15" S			Longitude		031	I°03'30.39" E		Elevation		25	5 ft			
Aircraft Information															
Registration ZU-WNW															
Make; Model; S/N Sling Aircraft Factory; Sling 4TSI (Serial Number: 366s)															
Damage to Aircraft		Substant		Total Aircraft Hou			urs	s 127							
Pilot-in-command															
Licence Type	Student Pilot Lic		nce (SPL)		Ger	Gender		Male				Age	57		
Licence Valid	Yes		Total Hours	1.36		6.0			Total Hours o			n Type		13.9	
Total Hours Past 30 Days		12.4			Total Flying Hours on Type P 90 Days			ast	13.9						
People On-board		1 + 0	Injuries	0	Fatalities			0	0		(on ground) 0		0		
What Happened															

On Monday morning, 27 May 2024, a chief flight instructor (CFI) and a student pilot on-board a Sling 4TSI aircraft were conducting circuit-and-landing exercises at Virginia Aerodrome (FAVG) in KwaZulu-Natal province when the accident occurred. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 141 of the Civil Aviation Regulations (CAR) 2011 as amended.

The CFI reported that they performed three (3) circuit-and-landing exercises on Runway 23, followed by an uneventful full-stop landing on the same runway. The student pilot taxied the aircraft to the apron and the CFI disembarked to allow the student pilot to perform more circuit-and-landing exercises. The CFI observed the flight exercises from the air traffic control (ATC) tower. The student pilot took off from Runway 23 and completed the first circuit which was followed by an uneventful touch-and-go landing on the same runway. On finals for the second touch-and-go landing, the student pilot selected the flaps to 30 degrees (°) with the aircraft's speed at approximately 75 knots (kts). The student pilot landed the aircraft with the nose gear first and it failed; subsequently, the propeller struck the runway. The aircraft veered off to the right of the runway and it came to rest on the grass area to the right of the runway. The Aerodrome Rescue and Firefighting (ARFF) personnel were dispatched; they swiftly responded to the accident scene. The aircraft sustained substantial damage; the student pilot was uninjured.

SRP date: 13 August 2024 Publication date: 19 August 2024

According to the air traffic control officer (ATCO) who was on duty at the time, the prevailing wind during the accident was 210° at 10 kts, which was deemed within the aircraft type's limitation of 15 knots.



Figure 1: Aerial view of the aerodrome and accident site. (Source: Google Earth)



Figure 2: The aircraft at the accident site with the collapsed nose gear (yellow circle). (Source: CFI)



Figure 3: A side view of the aircraft at the accident site. (Source: CFI)

The following information is an extract from the Pilot's Operating Handbook (POH):

1. Approach speed:

Long final - 65 KIAS to 75 KIAS.

Short final  $- \ge 62$  KIAS.

2. Auxiliary electric fuel pump - on.

3. Fuel selector - fullest tank.

4. Throttle - as required.

5. Wing flaps - extend as required.

6. Trim - as required.

7. Brakes - off (<u>carefully check that the brake</u>

stop-valve is off).

## **Findings**

- 1. The pilot was initially issued a Student Private Licence (SPL) by the South African Civil Aviation Authority (SACAA) on 4 July 2017. The licence was renewed on 3 May 2024 with an expiry date of 10 May 2025. The student pilot had 36.0 total hours with 13.9 hours on the aircraft type.
- 2. The student pilot had the aircraft type endorsed on his licence. He had a valid Class 2 aviation medical certificate that was issued by the SACAA on 15 August 2023 with an expiry date of 7 August 2024. The student pilot had restrictions to wear suitable corrective lenses.

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- 3. The aircraft's Certificate of Registration (C of R) was issued to the present owner on 6 July 2022.
- 4. The aircraft had a valid Authority to Fly (ATF) Certificate that was issued on 22 October 2023 with an expiry date of 6 November 2024.
- 5. The last 50-hour inspection on the aircraft was certified on 4 October 2023 at 62.3 hours. The accident occurred at 127 total airframe hours, meaning that the aircraft accrued 64.7 hours before the accident. There were no defects recorded in the flight folio at the time of the accident flight.
- 6. The aircraft was issued the Certificate of Release to Service (CRS) on 4 October 2023 at 62.3 hours with an expiry date of 3 October 2024 or at 162.3 hours, whichever occurs first.
- 7. The training school had a valid Approved Training Organisation (ATO) Certificate that was issued on 5 July 2021 with an expiry date of 31 July 2026.
- 8. The surface wind at the time of landing was 210° at 10 knots, which was within the 15 kts limit for this aircraft type.

#### **Probable Cause**

The student pilot landed the aircraft without flaring and with the nose gear first; as a result, the nose gear failed, and the propeller struck the runway.

### **Contributing Factor**

Lack of experience.

### Safety Action(s)

None.

#### Safety Message / Safety Recommendation

None.

### **About this Report**

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 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.

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## Disclaimer

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