



LIMITED ACCIDENT INVESTIGATION REPORT
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Reference Number	CA18/2/3/10176						
Classification	Accident	Date	18 June 2022	Time	1230Z		
Type of Operation	Private (Part 91)						
Location							
Place of Departure	Nelspruit Aerodrome (FANS), Mpumalanga Province			Place of Intended Landing	Rietfontein Airstrip, Mpumalanga Province		
Place of Accident	During landing on Runway 03 at Rietfontein Airstrip						
GPS Co-ordinates	Latitude	S 30° 11' 59"	Longitude	E 024° 56' 39"	Elevation	4500ft	
Aircraft Information							
Registration	ZU-INW						
Model/Make	Sling 4 (Serial Number: 073k)						
Damage to Aircraft	Substantial			Total Aircraft Hours	223		
Pilot-in-command							
Licence Type	Private Pilot Licence (PPL) Aeroplane	Gender	Male	Age	58		
Licence Valid	Yes						
Total Hours on Type	4.6			Total Flying Hours	126.0		
People On-board	1+0	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened							
<p>On Saturday, 18 June 2022, a pilot on-board a Sling 4 aircraft with registration ZU-INW was on a private flight from Nelspruit Aerodrome (FANS) to Rietfontein Airstrip, both in Mpumalanga province. 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.</p> <p>The pilot stated that the flight from FANS was uneventful. When he approached Rietfontein Airstrip, he lined up for Runway 03 with flaps set at 20° (degrees) and the aircraft's speed at 50 knots (kt). The aircraft touched down with the main landing gear first whilst at a speed of approximately 45kt. The aircraft bounced twice and subsequently contacted the ground with the nose landing gear first, which broke off. As a result, the aircraft's nose section dropped, and the propeller struck the ground. The aircraft skidded on its nose for approximately 15 metres (m) before coming to a stop on the runway.</p> <p>The aircraft sustained substantial damage to the nose landing gear, sheet metal on the bottom nose section, engine cowlings and the propeller. The pilot was not injured during the accident sequence.</p>							

The accident occurred during landing at Rietfontein Airstrip on Runway 03 at Global Positioning System (GPS) co-ordinates determined to be S 24° 56' 39" E 030° 11' 59", and at a field elevation of 4500 feet (ft).



Figure 1: The aircraft post-accident. (Source: Pilot)

Extract from the Sling 4 Pilot's Operating Handbook (POH):

- 1. The aircraft has a limitation stall speed of 48kt for landing configuration. The aircraft will stall at this speed with full flaps at maximum up weight in the most forward centre of gravity (CG) configuration.*
- 2. **Normal landing requirements:** Approach speed of 70 KIAS at 50ft above ground level (AGL) and flare the aircraft to a minimum flight speed with full flaps.*

What was found:

- According to the information in the pilot's questionnaire, the weather at the time of landing was as follows — wind direction: north-westerly; wind speed: 8 knots; visibility: clear; temperature: 15°C; clouds: clear.
- The pilot was initially issued a Private Pilot Licence (PPL) by the Regulator (SACAA) on 20 January 1983. The pilot conducted the skills test on 20 October 2021. Thereafter, he was reissued a license on 14 November 2021 with an expiry date of 31 October 2022. The pilot's Class 2 medical certificate was issued on 9 March 2022 with an expiry date of 9 March 2023 with a restriction to wear corrective lenses during flight.

- The pilot had a total of 126 flying hours. From his previous pilot training, he accumulated a total of 41.5 flying hours. Upon his return to flying after approximately 38 years of not flying, he applied for a Student Pilot Licence (SPL) on 17 March 2021 and commenced with his aircraft familiarisation and training towards his PPL on the Sling 2 aircraft type and accumulated 14.5 hours. He then converted to a Sling 4 aircraft type on 15 June 2022, accumulating 4 hours.
- The aircraft had a valid Authority to Fly (ATF), issued by the Regulator on 9 June 2021 with an expiry date of 30 June 2022. The aircraft was issued a Certificate of Registration on 6 November 2018.
- The aircraft maintenance organisation (AMO) issued the aircraft's Certificate of Release to Service (CRS) on 18 February 2022 following an annual maintenance at 199 airframe hours, with an expiry date of 18 February 2023 or at 299 airframe hours, whichever occurs first. The aircraft had a total of 223 airframe hours at the time of the accident.
- The AMO had a valid AMO certificate, issued by the Regulator on 28 October 2021 with an expiry date of 31 October 2022.
- There were no anomalies reported with the aircraft and its systems prior to or during the accident flight.

Probable cause

The aircraft's approach speed was low, resulting in a stall which caused the aircraft to drop or lose height before it bounced twice and landed on its nose gear, which subsequently broke off.

Contributory factor

The aircraft was unstable on approach.

Safety Action/s

None.

Safety Message

Pilots are reminded to adhere to the manufacturer's limitations especially on critical phases of flight such as landing or take-off.

Purpose of the Investigation

*In terms of Regulation 12.03.1 of the Civil Aviation Regulations (CAR) 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 apportion blame or liability.***

About this Report

Decisions regarding whether to investigate, and the scope of an investigation are based on many factors, including the level of safety benefit likely to be obtained from an investigation. For this occurrence, no 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 brief report. The report has been compiled using information supplied in the initial notification, as well as follow-up information 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 accident.

This report provides an opportunity to share safety message/s in the absence of an investigation.

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.

Disclaimer

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This report is issued by:

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