



LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number		CA18/3/2/1497									
Classification	Serious Incident		Date	19 August 2025		Time	1040Z				
Type of Operation	Training (Part 141)										
Location											
Place of Departure	Lanseria International Airport (FALA), Gauteng Province		Place of Intended Landing	Lanseria International Airport (FALA), Gauteng Province							
Place of Occurrence	Lanseria International Airport (FALA), Gauteng Province										
GPS Co-ordinates	Latitude	25° 56' 15" S		Longitude	27° 55' 45" E		Elevation	4500 ft			
Aircraft Information											
Registration	ZS-SVR										
Make; Model; S/N	Piper Cherokee; PA28-140 (Serial Number: 28-20118)										
Damage to Aircraft	Minor			Total Aircraft Hours	5501.06						
Pilot-in-command											
Licence Type	Student Pilot Licence (SPL)		Gender	Male		Age	23				
Licence Valid	Yes		Total Hours	32.7		Total Hours on Type	32.7				
Total Hours 30 Days	11.5		Total Flying on Type Past 90 Days	24.6							
People On-board	1+0		Injuries	0		Fatalities	0		Other (on ground)	0	
What Happened											
<p>On Tuesday, 19 August 2025, a student pilot (SP) on-board a Piper Cherokee PA-28-140 aircraft with registration ZS-SVR departed from Lanseria International Airport (FALA), Gauteng province, with the intention to land back at the same airport. 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.</p> <p>The SP stated that he successfully completed three touch-and-go landings with his instructor. Thereafter, the instructor disembarked from the aircraft and allowed him to conduct a solo consolidation flight. <i>This was the SP's second solo consolidation flight.</i> During the first approach for landing, the SP stated that he noticed that the wind speed was 11 knots (kts) blowing at a direction varying between 260° and 320°. During the roundout (flare) before the aircraft touched down, the SP felt the aircraft being pushed to the right, it subsequently impacted the ground hard which caused the aircraft to bounce. He then applied power to arrest the rate of descent; however, the aircraft</p>											

touched down hard again and began drifting to the left of the runway. As a result, he applied right rudder but the aircraft, due to the excessive speed, continued to veer towards the left and the right wing impacted the runway surface; moreover, the nose landing gear broke which caused the nose to drop and the propeller to impact the surface of the runway.

The aircraft came to a full stop a few metres from the left of the runway edge facing 090°. The SP evacuated the aircraft unassisted; he was also uninjured. The aircraft sustained damage to the nose landing gear and the propeller blades which were bent.

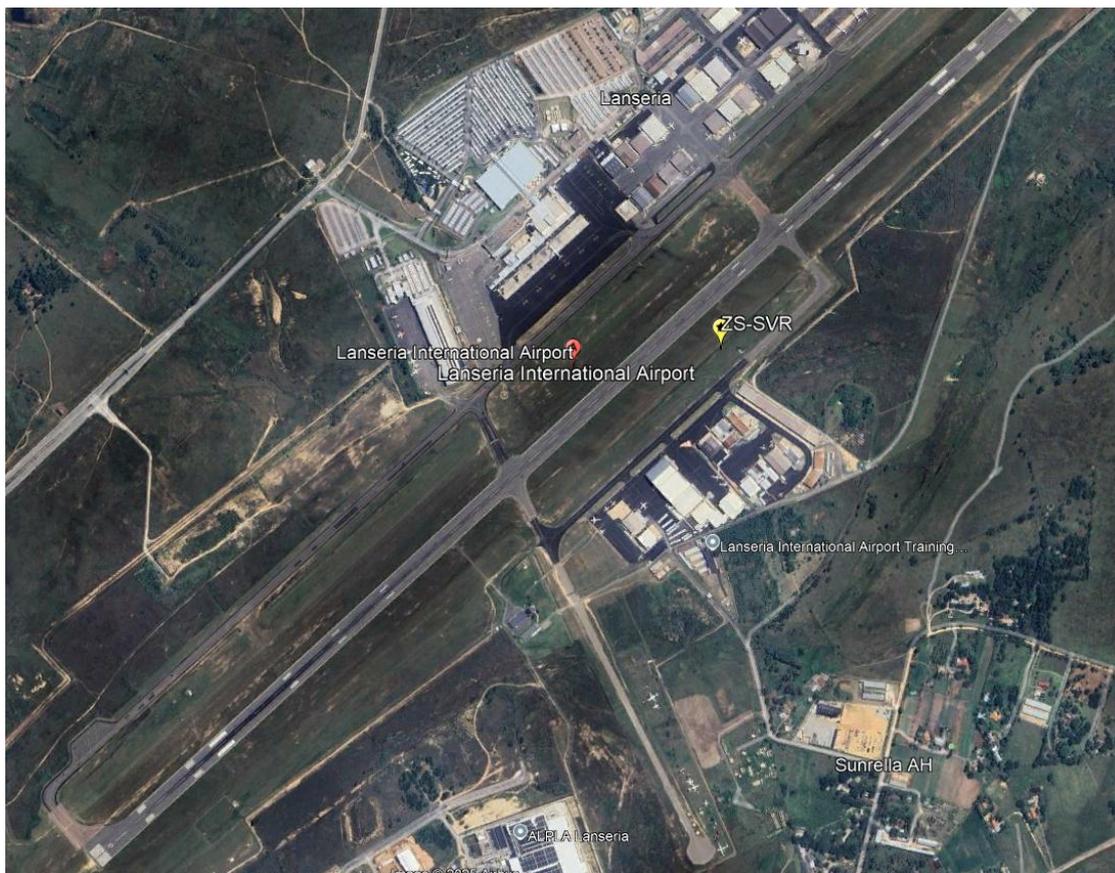


Figure 1: An overview of FALA; the yellow mark indicates where the aircraft came to rest. (Source: Google Earth)



Figure 2: The aircraft at the serious incident site. (Source: Pilot)



Figure 3: The front view of aircraft after the serious incident. (Source: Pilot)

Meteorological Information (Source: South African Weather Service [SAWS])

Wind Direction	300°	Wind Speed	11 Kts	Visibility	10 Km
Temperature	24°C	Cloud Cover	FEW	Cloud Base	4500Ft
Dew Point	04°C	QNH	1024 hPa		

According to the weather data from the South African Weather Service (SAWS), the calculated crosswind was 8.4 kts.

The flight manual for the aircraft type states that the maximum crosswind component in which the aeroplane has been demonstrated to be safe for take-off and landing is 17 knots at a tower height of 33 feet.

Based on the indicated wind, the crosswind component would have been approximately 9 kts below the demonstrated maximum value; therefore, the aircraft could be operated adequately in such conditions.

Findings

1. Pilot

- 1.1. The student pilot (SP) had a Student Pilot Licence (SPL) that was initially issued by the Regulator (SACAA) on 19 May 2025 with an expiry date of 17 May 2026. The SP's Class 1 aviation medical certificate was issued on 6 May 2025 with an expiry date of 31 May 2026 with a VDL restriction (valid only with correction for defective distance vision) .
- 1.2. The SP had a total of 32.7 hours which were accumulated on the aircraft type.

2. Aircraft

- 2.1. The mandatory periodic inspection (MPI) of the aircraft was conducted and certified on 24 July 2025 at 5405.1 hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 23 July 2026 or at 5505.1 hours, whichever comes first. The aircraft accumulated a total of 96 hours since the last MPI.
- 2.2. The aircraft had a valid Certificate of Airworthiness (C of A) that was issued by the Regulator on 6 April 2012 with an expiry date of 30 June 2026. The aircraft's Certificate of Registration (C of R) was issued to the current owner on 21 December 2023.
- 2.3. The aircraft maintenance organisation (AMO) which conducted the MPI of the aircraft had an AMO Certificate that was issued on 5 May 2025 with an expiry date of 30 April 2026. The aircraft type was endorsed on the AMO's operational specifications.
- 2.4. The aircraft could be operated in crosswind components up to 17 kts. However, any wind variation below this limit could still affect the aircraft's performance and stability during landing. Safe landings under such conditions require correct technique and adequate pilot's experience.

<p>3. <u>Environment</u></p> <p>3.1. Crosswind weather conditions prevailed at the time of the flight. The weather was a contributing factor to this serious incident.</p> <p>4. <u>Mission</u></p> <p>4.1. The aircraft encountered crosswind conditions during the landing phase, which led to a hard landing and a bounce before the aircraft veered off to the left of the runway. As a result, the nose landing gear and the propeller were damaged.</p>
<p>Probable Cause(s)</p> <p>Loss of directional control after a hard landing.</p>
<p>Contributing Factor(s)</p> <p>Crosswind weather condition.</p>
<p>Safety Action(s)</p> <p>None.</p>
<p>Safety Message and/or Safety Recommendation/s</p> <p>None.</p>
<p>About this Report</p> <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>
<p>Purpose</p> <p><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></p>
<p>Disclaimer</p> <p><i>This report is produced without prejudice to the rights of the AIID, which are reserved.</i></p>

This report is issued by:

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