LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/3/2/1520						
Classification	Serious Incident	**Date**	6 January 2026		**Time**	1030Z	
Type of Operation	Training (Part 141)						
Location							
Place of Departure	Wonderboom Airport (FAWB), Gauteng Province	Place of Intended Landing	Wonderboom Airport (FAWB), Gauteng Province				
Place of Occurrence	On Runway 34 at Rustenburg Airfield (FARG), North West Province						
GPS Co-ordinates	Latitude	23° 38' 28" S	Longitude	27° 15' 47" E		Elevation	3 674ft
Aircraft Information							
Registration	ZS-SGI						
Make; Model; S/N	Piper; PA-28-140 Cherokee (Serial Number: 28-26096)						
Damage to Aircraft	Substantial		Total Aircraft Hours	7 853.8			
Pilot-in-command							
Licence Type	Student Pilot Licence (SPL)		Gender	Male		Age	28
Licence Valid	Yes	Total Hours	46	Total Hours on Type			46
Total Hours 30 Days	1.7		Total Flying on Type Past 90 Days	13.6			
People On-board	1+0	**Injuries**	0	**Fatalities**	0	**Other (on ground)**	0

What Happened

On Tuesday afternoon, 6 January 2026, a student pilot (SP) on-board a Piper PA-28-140 Cherokee aircraft registered ZS-SGI was conducting a solo navigation training flight from Wonderboom Airport (FAWB) in Gauteng province with the intention to land at the same airport. Visual meteorological conditions (VMC) prevailed at the time of the flight which was conducted under the provisions of Part 141 of the Civil Aviation Regulations (CAR) 2011, as amended.

According to the SP, the aircraft had a total of 50 US Gallons of Avgas LL100 in the tanks during the pre-flight inspection. The SP had planned to route to Pilanesberg Airfield (FAPN) and then to Rustenburg Airfield (FARG), both in North West province, before returning to FAWB. The aircraft took off from Runway 29 and the flight to FAPN was uneventful. Upon reaching FAPN, the SP flew over the airfield (FAPN) before proceeding to FARG. After reaching FARG, he joined overhead in accordance with (IAW) the unmanned aerodrome joining procedures. After observing the windsock, he noted that the wind favoured Runway 34 and, thus, joined the circuit on the left downwind.

The aircraft later turned finals for Runway 34 during which the SP selected third-stage flaps whilst maintaining a speed of approximately 85 miles per hour (mph). During landing, the main wheels touched down hard and the aircraft bounced. Consequently, the nose pitched down, and the aircraft

landed hard with the nose wheel first. Thus, the nose gear strut broke, and the propeller struck the runway surface. The aircraft skidded on its nose gear oleo and, later, stopped on the left side of the runway. Thereafter, the SP switched off the master switch and disembarked from the aircraft; he was not injured. The aircraft was substantially damaged.

Figure 1: The yellow arrow indicates the landing direction. (Source: Google Earth)

Figure 2: The aircraft on the left side of the runway with the yellow arrow indicating the direction of landing. (Source: Operator)

Figures 3 and 4: The broken bottom part of the nose gear with the nose wheel still secured to the axle (left picture). The top part of the nose gear strut with the torque link still attached to the oleo (right picture). (Source: Operator)

Approach and Landing Procedure (Source: Piper Cherokee PA-28-180 Pilot's Operating Handbook [POH])

When on final approach, the airplane should be trimmed to an approach speed of about 76 miles per hour (mph) indicated air speed (IAS) (66 KTS IAS) with extended flaps.

According to the POH, the recommended approach speed is 76mph. The SP stated that the approach speed was approximately 85mph, indicating that the approach speed was 9mph more than the recommended speed.

Bouncing During Touchdown (Source: FAA-aeroplane Flying Handbook Chapter 8)

When the aeroplane contacts the ground with a sharp impact as the result of an improper attitude or an excessive rate of sink, it tends to bounce back into the air. When a bounce is severe, the safest procedure is to execute a go-around immediately. No attempt to salvage the landing should be made. Full power should be applied while simultaneously maintaining directional control and lowering the nose to a safe climb attitude. The go-around procedure should be continued even though the airplane may descend, and another bounce may be encountered. It would be extremely foolish to attempt a landing from a bad bounce since airspeed diminishes very rapidly in the nose-high attitude, and a stall may occur before a subsequent touchdown could be made.

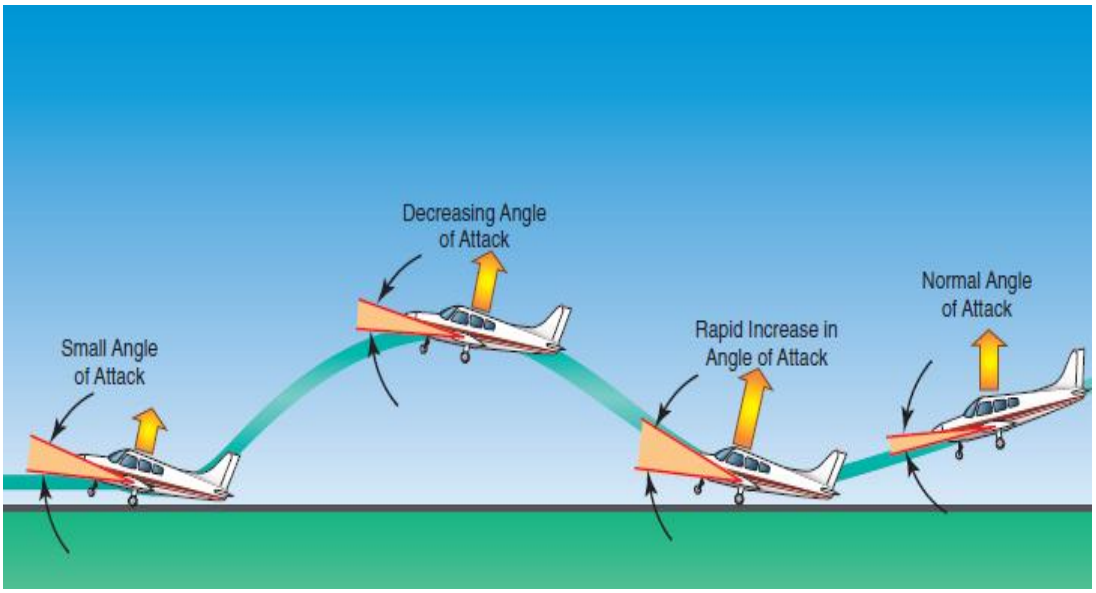

Illustration 1: A depiction of a bounce. (Source: FAA-Aeroplane Flying Handbook)

Findings

1. The student pilot (SP) had a Student Pilot Licence (SPL) that was initially issued by the Regulator on 29 June 2025 with an expiry date of 28 June 2026. The SP's licence was valid at the time of the flight.

2. The SP had a Class 2 aviation medical certificate that was issued on 20 June 2025 with an expiry date of 30 June 2030. No restrictions were listed on the SP's medical certificate.

3. The SP had a total of 46 flying hours accumulated on the aircraft type. The aircraft type was endorsed in his SPL.

4. The last mandatory periodic inspection (MPI) of the aircraft was conducted and certified on 11 December 2025 at 7 842.70 total airframe hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 12 June 2026 or at 7 896.80 hours, whichever comes first. The aircraft had accrued 54.10 hours since the last MPI.

5. The aircraft maintenance organisation (AMO) which conducted the MPI of the aircraft had an AMO Certificate that was issued by the Regulator on 13 August 2025 with an expiry date of 31 August 2026.

6. The aircraft Certificate of Airworthiness (C of A) was initially issued by the Regulator on 20 January 2009. The latest C of A had an expiry date of 12 September 2026.

7. The Certificate of Registration (C of R) was issued to the current owner on 28 October 2022.

8. The training organisation had an Approved Training Organisation (ATO) Certificate that was issued by the Regulator on 4 July 2023 with an expiry date of 30 June 2028.

Probable Cause(s)

Unstable approach as the aircraft approached the runway at high speed and, subsequently, bounced. Recovery was not affected which resulted in the aircraft's nose pitching down; the aircraft landed hard with the nose wheel first.

Contributing Factor(s)

1. Lack of experience.
2. Failure to execute a go-around.

Safety Action(s)

None.

Safety Message and/or Safety Recommendation/s

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.

Disclaimer

This report is issued by:

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