



Section/division **Accident and Incident Investigations Division**

Form Number: CA 12-57

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/3/2/1554						
Classification	Serious Incident		Date	23 June 2026		Time	1150Z
Type of Operation	Training (Part 141)						
Location							
Place of Departure	Brakpan Airfield (FABB), Gauteng Province			Place of Intended Landing	Brakpan Airfield (FABB), Gauteng Province		
Place of Occurrence	Approximately 10 metres (m) to the right of Runway 36 at Brakpan Airfield (FABB)						
GPS Co-ordinates	Latitude	26° 14' 20.24" S	Longitude	28° 18' 07.04" E	Elevation	5 354ft	
Aircraft Information							
Registration	ZS-DPN						
Make; Model; S/N	Piper; PA-28-180 (Serial Number: 28-1175)						
Damage to Aircraft	Substantial			Total Aircraft Hours	7 198.11		
Pilot-in-command							
Licence Type	Student Pilot Licence		Gender	Female		Age	28
Licence Valid	Yes	Total Hours	57.4		Total Hours on Type	57.4	
Total Hours 30 Days	9.1		Total Flying on Type Past 90 Days			21.5	
People On-board	1+0	Injuries	1	Fatalities	0	Other (on ground)	0
What Happened							
On Tuesday, 23 June 2026, a student pilot (SP) on-board a Piper PA-28-180 aircraft registered ZS-DPN was conducting a solo training flight from Brakpan Airfield (FABB) in Gauteng province with the intention to land at the same airfield when the serious incident 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 SP stated that she conducted a pre-flight inspection of the aircraft and found no anomalies. Thereafter, she took off from Runway (RWY) 36 to the general flying area (GFA). The flight was uneventful. Upon her return, she completed two circuit touch-and-go landings on RWY 36. She had planned to conduct a full-stop landing on the third circuit. After completing her downwind and base checks, she made her final radio call on frequency 122.70-Megahertz (MHz) as she turned final approach. The SP reported that the approach speed was stable at 80 miles per hour (mph) with full flaps, and that she used a sideslip landing technique (to align to the runway centreline and/or to prevent drift). Upon touchdown after the threshold, the aircraft was right off the centreline and it veered further to the right. The SP attempted to correct the alignment using the left rudder, but she							

was not successful. The aircraft drifted off the runway and came to rest in the bushes. The wing tip, propeller blade and the nose gear were damaged. The pilot sustained minor injuries.



Figure 1: Aerial view of the serious incident site. (Source: Google Earth)



Figure 2: Final resting position of the aircraft. (Source: Operator)



Figure 3: The damaged propeller blade.

Post-serious Incident Investigation

After the serious incident, the aircraft maintenance engineer (AME) conducted the initial assessment. The AME noted that the aircraft had sufficient fuel and oil and was configured correctly for landing. The flight controls and brake system were inspected, and no anomalies were found.

Meteorological Information

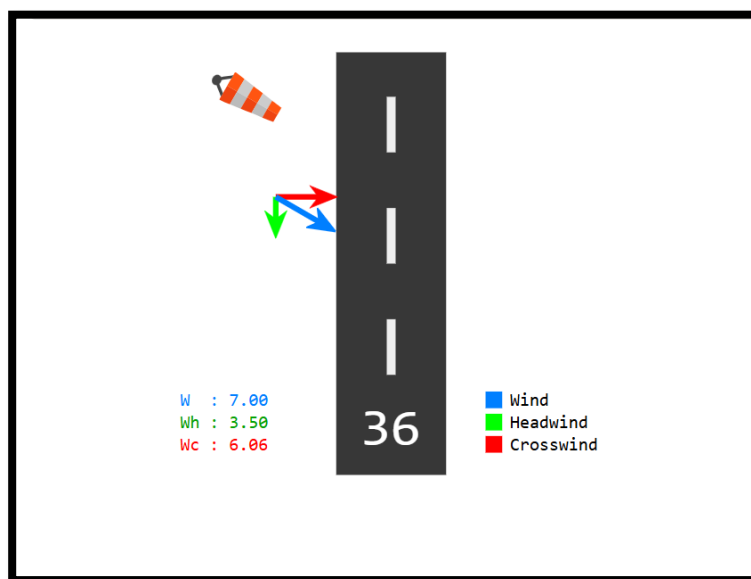
The following Meteorological Aerodrome Report (METAR) was issued by the South African Weather Service (SAWS) for O.R. Tambo International Airport (FAOR) on 23 June 2026 at 1130Z. The serious incident occurred at FABB RWY 36, approximately 7 nautical miles (nm) north-west of FAOR.

METAR FAOR 231130Z 30007KT 250V330 9999 FEW040 17/07 Q1025 NOSIG=

Wind Direction	300°	Wind Speed	7kt	Visibility	9999
Temperature	17°C	Cloud Cover	Few	Cloud Base	040
Dew Point	7°C	QNH	1025		

Crosswind Component Calculation

(Source: <https://e6bx.com/wind-components/>)



**Maximum Demonstrated
Crosswind Component PA-28-180**

17 Knots

The crosswind was minimal and played no role in this serious incident. The maximum crosswind component was 17 knots.

Crosswind Approach Using the Sideslip Technique (Source: FAA-H-8083-3A)

The wing-low (sideslip) method will compensate for a crosswind from any angle, but more important, it enables the pilot to simultaneously keep the airplane's ground track and longitudinal axis aligned with the runway centreline throughout the final approach, roundout, touchdown, and after-landing roll. This prevents the airplane from touching down in a sideward motion and imposing damaging side loads on the landing gear. To use the wing-low method, the pilot aligns the airplane's heading with the centreline of the runway, notes the rate and direction of drift, and then promptly applies drift correction by lowering the upwind wing [Figure 4]. The amount the wing must be lowered depends on the rate of drift. When the wing is lowered, the airplane will tend to turn in that direction. It is then necessary to simultaneously apply sufficient opposite rudder pressure to prevent the turn and keep the airplane's longitudinal axis aligned with the runway. In other words, the drift is controlled with aileron, and the heading with rudder. The airplane will now be sideslipping into the wind just enough that both the resultant flight path and the ground track are aligned with the runway. If the crosswind

diminishes, this crosswind correction is reduced accordingly, or the airplane will begin slipping away from the desired approach path.



Figure 4: Sideslip technique illustration. (Source: FAA-H-8083-3A)

Pilot

The SP had a Student Pilot Licence (SPL) that was initially issued by the Regulator (SACAA) on 29 April 2025 with an expiry date of 20 April 2027. The SP had logged a total of 57.4 hours on the aircraft type. The SP had a Class 2 aviation medical certificate that was issued on 15 April 2025 with an expiry date of 30 April 2030 with no restrictions.

Aircraft

The last mandatory periodic inspection (MPI) of the aircraft was certified on 30 April 2026 at 7 169.29 total airframe hours. The aircraft had accrued 28.82 hours since the stated MPI. A Certificate of Release to Service (CRS) was issued on 30 April 2026 by an aircraft maintenance organisation (AMO). The CRS had an expiry date of 29 April 2027 or at 7 269.29 airframe hours, whichever comes first. The aircraft had a valid Certificate of Airworthiness (C of A) that was initially issued by the Regulator on 19 December 2011. The C of A was renewed on 2 September 2025 with an expiry date of 31 December 2026. A Certificate of Registration (C of R) was issued to the present owner on 1 March 2021.

The AMO which conducted the MPI was issued an AMO Certificate on 26 March 2026 with an expiry date of 31 March 2027. The weight and balance of the aircraft was within its limits, and the aircraft had sufficient fuel. The rudder cables and brakes were inspected, and no faults were found.

Approved Training Organisation The approved training organisation (ATO) had an ATO Certificate that was issued by the Regulator on 20 September 2021 with an expiry date of 31 August 2026.
Findings 1. The student pilot (SP) had a Student Pilot Licence (SPL) with 57.4 hours on the Piper PA-28-180 aircraft. She was conducting a solo flight towards acquiring a Private Pilot Licence (PPL). 2. The records indicated that the aircraft was properly maintained. 3. The approved training organisation (ATO) was certified and rated for the training that was conducted. 4. The aircraft touched down right off the centreline and veered to the right of the runway after the SP was unable to maintain directional control. The nose landing gear bent, and the propeller struck the ground. 5. The SP used a sideslip technique configuration during landing. 6. Meteorological conditions, including the crosswind, did not contribute to this serious incident. 7. The SP vacated the aircraft unassisted. No injuries were reported during the serious incident.
Probable Cause(s) The aircraft which was configured in a sideslip veered off the runway after touchdown due to the student pilot's inability to maintain directional control.
Contributing Factor(s) Incorrect landing technique.
Safety Action(s) None.
Safety Message and/or Safety Recommendation/s None.
About this Report <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</i>

<i>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> <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>
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**