

**PRELIMINARY ACCIDENT REPORT**

**Accident and Incident Investigations Division**

Accident  
- Preliminary Report -  
AIID Ref No: CA18/2/3/10537



**Figure 1:** The file picture of ZS-KHZ aircraft. (Source: Flight Zone Aviation Photography)

Description:

On Saturday morning, 14 December 2024, a solo student pilot onboard a Piper PA-38-112 aircraft with registration ZS-KHZ took off from Cape Town International Aerodrome (FACT) in the Western Cape province on a navigational training flight to conduct a touch-and-go at Saldanha Aerodrome (FASD) before returning to FACT for a full stop landing. The flight was conducted under visual meteorological conditions (VMC) by day. The student pilot joined overhead FASD and followed the unmanned aerodrome joining procedure and he assessed the wind by looking at the windsock at the aerodrome. He opted to perform a touch-and-go on Runway 02. The student pilot was unable to maintain directional after applying power for lift-off, the aircraft veered to the left and departed the runway surface. The nose landing gear bent backward, and the aircraft nosed over coming to rest in an inverted attitude. The student pilot suffered minor injuries, and the aircraft sustained substantial damage.

## Occurrence Details

<b>Reference Number</b>	: CA18/2/3/10537
<b>Occurrence Category</b>	: Accident (Category 2)
<b>Type of Operation</b>	: Training (Part 141)
<b>Name of Operator</b>	: Cape Town International Aviation Academy
<b>Aircraft Registration</b>	: ZS-KHZ
<b>Aircraft Make and Model</b>	: Piper PA-38-112
<b>Nationality</b>	: South African
<b>Place</b>	: Saldanha Aerodrome (FASD), Western Cape province
<b>Date and Time</b>	: 14 December 2024 at 0812Z
<b>Injuries</b>	: Minor injuries
<b>Damage</b>	: Substantial

## 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.*

*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.*

## Investigation Process

The Accident and Incident Investigations Division (AIID) of the South African Civil Aviation Authority (SACAA) was notified of an accident involving a Piper PA-38-112 which occurred at Saldanha Aerodrome in the Western Cape province on 14 December 2024 at 0812Z. The occurrence was classified as an accident according to the CAR 2011 Part 12 and the International Civil Aviation Organisation (ICAO) Standard (STD) Annex 13 definitions.

The AIID has appointed an investigator-in-charge. No on-site investigation was conducted. The AIID will lead the investigation and issue the final report of this accident in accordance with the CAR 2011 Part 12 and the ICAO Annex 13. The information contained in this preliminary report is derived from the information gathered during the ongoing investigation into the occurrence. Later, an interim or final report may contain altered information in case new evidence is found during the ongoing investigation that requires changes to the information depicted in this report.

*The AIID reports are made available to the public at:*

<https://www.caa.co.za/industry-information/accidents-and-incidents/>

### Notes:

- Whenever the following words are mentioned in this report, they shall mean the following:  
Accident — this investigated of accident  
Aircraft — the Piper PA-38-112 involved in this accident  
Investigation — the investigation into the circumstances of this accident  
Pilots — the student pilot involved in this accident  
Report — this accident report*
- Photos and figures used in this report were taken from different sources and may have been adjusted from the original for the sole purpose of improving the clarity of the report. Modifications to images used in this report were limited to cropping, magnification, file compression; enhancement of colour, brightness, and contrast; or addition of text boxes, arrows, or lines.*

## Disclaimer

This report is produced without prejudice to the rights of the SACAA, which are reserved.

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<b>Abbreviation</b>	<b>Description</b>
°	Degrees
°C	Degrees Celsius
AIID	Accident and Incident Investigations Division
AMO	Aircraft Maintenance Organisation
ATC	Air Traffic Control
ATO	Approved Training Organisation
CAR	Civil Aviation Regulations
C of A	Certificate of Airworthiness
C of R	Certificate of Registration
CRS	Certificate of Release to Service
FACT	Cape Town International Aerodrome
FALW	Langebaanweg Aerodrome
FASD	Saldanha Aerodrome
ft	feet
GPS	Global Positioning System
hPa	hectopascal
kt	knots
m	metres
METAR	Meteorological Aerodrome Report
MTOW	Maximum Take-off Weight
QNH	Barometric Pressure Adjusted to Sea Level
SACAA	South African Civil Aviation Authority
SAWS	South African Weather Service
SPL	Student Pilot Licence
TBO	Time Between Overhaul
UTC	Coordinated Universal Time
VHF	Very High Frequency
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
Z	Zulu (Term for Universal Co-ordinated Time – Zero Hours Greenwich)

## 1. FACTUAL INFORMATION

### 1.1 History of Flight

- 1.1.1 On Saturday morning, 14 December 2024 at 0630Z, a solo student pilot onboard a Piper PA-38-1120 aircraft with registration ZS-KHZ took off on a training cross-country flight from Cape Town International Aerodrome (FACT) in the Western Cape province with the intention to perform a touch-and-go at Saldanha Aerodrome (FASD) and then to return to FACT for a full-stop landing. 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.
- 1.1.2 According to an eyewitness he observed the aircraft joining overhead the aerodrome. The student pilot flew two circuits before he opted to perform the touch-and-go on Runway 02, however, the prevailing wind was from the south-south-westerly direction and favoured Runway 20 for landing. The student pilot stated that he had selected 20° wing flaps for landing. After the aircraft touchdown, he retracted the wing flaps and applied full power for take-off. At approximately 60 knots he applied back pressure on the control column to lift off. The aircraft nose wheel lifted off the ground, but the main wheels remained in contact with the runway surface. At that stage, the aircraft started to veer to the left of the centreline, and the student pilot was unable to counteract the situation. The aircraft veered off the runway surface and careered through the dry grass next to the runway, before the nose landing gear strut bent backward and the aircraft nosed over, coming to rest in an inverted attitude.
- 1.1.3 Several people who were at the aerodrome at the time rushed to the scene to assist the pilot who was able to exit the cockpit unassisted. Emergency medical services responded to the scene and following an assessment of the pilot he was taken to hospital for a medical check-up. The aircraft sustained substantial damage.
- 1.1.4 The accident occurred during daytime at Global Positioning System (GPS) co-ordinates determined to be 32°57'49.05" South 017°58'09.04" East, at an elevation of 50 feet (ft).



**Figure 2:** The yellow pin indicates the position of the aircraft ZS-KHZ at FASD. FALW was located 10nm to the East of FASD. (Source: Google Earth)

## 1.2 Injuries to Persons

Injuries	Pilots	Crew	Pass.	Total On-board	Other
Fatal	-	-	-	-	-
Serious	-	-	-	-	-
Minor	1	-	-	1	-
None	-	-	-	-	-
<b>Total</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>

Note: Other means people on the ground.

## 1.3 Damage to Aircraft

1.3.1 The aircraft was substantially damaged during the accident sequence.



**Figure 3:** The wreckage came to rest next to the runway.

#### 1.4 Other Damage

1.4.1 No other damage was caused.

#### 1.5 Personnel Information

##### 1.5.1 Pilot-in-Command (PIC)

Nationality	South African	Gender	Male	Age	23
Licence Type	Student Pilot Licence (SPL)				
Licence Valid	Yes	Type Endorsed	Yes		
Ratings	None				
Medical Expiry Date	30 September 2025				
Restrictions	None				
Previous Accidents	None				

Note: Previous accidents refer to past accidents the pilot was involved in, when relevant to this accident.

##### Flying Experience:

Total Hours	61.6
Total Past 90 Days	12.7
Total on Type Past 90 Days	12.7
Total on Type	61.6

## 1.6 Aircraft Information

### 1.6.1 Piper PA-38-112 (Source: Pilot's Operating Handbook, Section 7, Description Operation)

The Piper PA-38-112 is a single-engine, fixed-gear, low-wing monoplane of all metal construction. It has a two-place seating arrangement. The empennage is a T-tail configuration with a fixed horizontal stabilizer mounted atop the vertical fin.

#### Airframe:

Manufacturer/Model	Piper Aircraft Corporation / PA-38-112	
Serial Number	38-79A0039	
Year of Manufacture	1979	
Total Airframe Hours (at the time of the accident)	11 063.4	
Last Inspection (Hours & Date)	10 970.6	15 October 2024
Hours Since Last Inspection	92.8	
MTOW	757kg	
CRS Issue Date	30 September 2024	
C of A (Issue Date & Expiry Date)	6 August 2010	31 March 2025
C of R (Issue Date) (Present Owner)	12 July 2022	
Type of Fuel Used	Avgas	
Operating Category	Production Built	
Previous Accidents	None	

Note: Previous accidents refer to past accidents the aircraft was involved in, when relevant to this accident.

#### Engine:

Manufacturer/Model	Lycoming O-235-L2C
Serial Number	L-19483-15
Hours Since New	4 602.2
Hours Since Overhaul	2 107.0

#### Propeller:

Manufacturer/Model	Sensenich 72CK-O-56
Serial Number	K9408
Hours Since New	1 960.1
Hours Since Overhaul	TBO not yet reached

## 1.7 Meteorological Information

1.7.1 The weather information entered in the table below was obtained from the student pilot questionnaire.



Wind Direction	180°	Wind Speed	10kt	Visibility	9999m
Temperature	19°C	Cloud Cover	CAVOK	Cloud Base	Nil
Dew Point	9°C	QNH	1015hPa		

1.7.2 The weather information below was obtained from the meteorological aerodrome report (METAR) that was issued by the South African Weather Service (SAWS), recorded at Langebaanweg Aerodrome (FALW) on 14 December 2024 at 0800Z. FALW is located 10nm east of FASD.

FALW 140800Z AUTO 12005KT //// // ///// 23/06 Q1015=

Wind Direction	120°	Wind Speed	5kt	Visibility	9999m
Temperature	23°C	Cloud Cover	CAVOK	Cloud Base	Nil
Dew Point	6°C	QNH	1015hPa		

## 1.8 Aids to Navigation

1.8.1 The aircraft was equipped with standard navigational equipment as approved by the Regulator (SACAA). There were no records indicating that the navigational equipment was unserviceable before the flight.

## 1.9 Communication

1.9.1 The aircraft was equipped with a standard communication system as approved by the Regulator. There were no recorded defects with the communication system before the flight.

1.9.2 There was no radio communication between the pilot and the ATC officer at FALW as the tower was closed on the day.

## 1.10 Aerodrome Information

Aerodrome Location	Saldanha Aerodrome (FASD)
Aerodrome Status	Licensed
Aerodrome GPS coordinates	32°57'49.05" South 017°58'09.04" East
Aerodrome Elevation	50ft
Runway Headings	02/20
Dimensions of Runway	1 419m x 25m

Heading of Runway Used	02
Runway Surface	Asphalt
Approach Facilities	Runway lights
Radio Frequencies	122.50 MHz - CTR inbound 122.70 MHz – Aerodrome in-sight

Information in the table above was obtained from the West Coast Flying Club website:  
[www.wcflyingclub.co.za](http://www.wcflyingclub.co.za)

## 1.11 Flight Recorders

1.11.1 The aircraft was neither equipped with a flight data recorder (FDR) nor a cockpit voice recorder (CVR) nor was it required by regulation to be fitted to the aircraft type.

## 1.12 Wreckage and Impact Information

1.12.1 The aircraft veered off the runway to the left approximately 600m past the threshold of runway 02. It then careers through the dry grass, bouncing on the uneven terrain for a distance of approximately 25m. The nose wheel strut assembly bent backward during this sequence and the aircraft nosed over, coming to rest in an inverted attitude.



**Figure 4:** The path through the grass after the aircraft veered off the runway.



**Figure 5:** A section of the runway with the aircraft next to it.



**Figure 6:** The aircraft as it came to rest.



**Figure 7:** Aft view of the wreckage.

### **1.13 Medical and Pathological Information**

1.13.1 To be discussed in the final report.

### **1.14 Fire**

1.14.1 There was no pre- or post-impact fire.

### **1.15 Survival Aspects**

1.15.1 The accident was considered survivable.

### **1.16 Tests and Research**

1.16.1 To be discussed in the final report.

### **1.17 Organisational and Management Information**

1.17.1 This was a training flight conducted under the provisions of Part 141 of the CAR 2011 as amended. The ATO had a valid ATO Certificate that was issued by the Regulator (SACAA) on 4 January 2023 with an expiry date of 31 August 2027.

1.17.2 The last maintenance inspection of the aircraft was conducted and certified on 15 October 2024 at 10 970.6 hours. The aircraft maintenance organisation (AMO) that maintained the aircraft had a valid AMO Certificate that was issued by the Regulator on 31 August 2024 with an expiry date of 31 August 2025.

## 1.18 Additional Information

1.18.1 To be discussed in the final report.

## 1.19 Useful or Effective Investigation Techniques

1.19.1 To be discussed in the final report.

## 2. FINDINGS

### 2.1 General

From the available evidence, the following preliminary findings were made with respect to this accident. These shall not be read as apportioning blame or liability to any organisation or individual.

To serve the objective of this investigation, the following sections are included in the conclusions heading:

- **Findings** — are statements of all significant conditions, events, or circumstances in this accident. The findings are significant steps in this accident sequence, but they are not always causal or indicate deficiencies.

### 2.2 Findings

#### The Pilot

2.2.1 The pilot had a Student Pilot Licence (SPL) that was issued by the Regulator on 26 January 2023 with an expiry date of 5 March 2025. The pilot had flown a total of 61.6 hours of which all the hours were on the aircraft type.

2.2.2 The student pilot was issued a Class 2 aviation medical certificate on 15 November 2022 with an expiry date of 15 November 2027 without any restrictions.

2.2.3 The student pilot opted to perform the touch-and-go on Runway 02, resulting in a downwind landing.

2.2.4 The student pilot was attended to on-site by emergency medical personnel and was taken to the hospital for a medical check-up.

#### The Aircraft

2.2.5 The last maintenance inspection of the aircraft was certified on 15 October 2024 at 10 970.6 airframe hours. The aircraft accrued 92.8 hours since the said inspection.

2.2.6 The aircraft's Certificate of Airworthiness (C of A) was initially issued on 6 August 2010. The latest C of A had an expiry date of 31 March 2025.

2.2.7 The aircraft's Certificate of Registration (C of R) was issued to the present owner on 12 July 2022.

2.2.8 The aircraft was issued a Certificate of Release to Service (CRS) on 30 September 2024 with an expiry date of 30 September 2025 or at 11 070.6 airframe hours, whichever occurs first.

#### Meteorological Information

2.2.9 According to the METAR data for FALW, fine weather conditions prevailed at the time of the flight.

2.2.10 According to an eyewitness that was at FASD at the time of the accident the wind was from the south-southwest at approximately 10 to 15 knots.

#### Approved Training Organisation (ATO)

2.2.11 The ATO was issued an Approved Training Organisation (ATO) Certificate by the Regulator (SACAA) on 4 January 2023 with an expiry date of 31 August 2027.

#### Aerodrome

2.2.12 FASD was a licensed aerodrome with a single asphalt runway orientated 02/20, which was 1 419m long and 25m wide. There was a windsock at the aerodrome at the time of this flight.

**3. On-going Investigation**

3.1 The AIID investigation is ongoing, and the investigator will investigate other aspects of this occurrence which may or may not have safety implications.

**4. Safety Recommendation**

4.1 None.

**5. Appendices**

5.1 None.

**This report is issued by:  
Accident and Incident Investigations Division  
South African Civil Aviation Authority  
Republic of South Africa**