

Section/division Accident and Incident Investigations Division

# LIMITED OCCURRENCE INVESTIGATION REPORT - FINAL

Form Number: CA 12-57

Reference Number	CA18/3/2/1406													
Classification Serious in			cident		Date 18 February 2023			Ti	me	0915Z				
Type of Operation Private (Part 91)														
Location														
Place of Departure	Silver Creek Airfield, North West Province			I Place of Intended Landing I				r Creek Airfield, North t Province						
Place of Occurrence Left of Runway 08 at Silver Creek Airfield in the North West Province														
GPS Co-ordi	S Co-ordinates Latitude 25°47'55.42		5.42"	S	S Longitude		27°	31'14.02" E		Elevation		4	360 ft	
Aircraft Information														
Registration ZS-MUD														
Make; Model; S/N Piper PA-28R (Serial Number: 28R-7837202)														
Damage to Aircraft Minor				Total Aircraft Hours			6354.62							
Pilot-in-command														
Licence Type	Commercial Pilot Licence (CPL)		Ger	nder		Male				Age	60			
Licence Valid	Yes		Total Hours	9220.		0.1		Total Hours		lours o	on Type		116	.9
Total Hours Past 30 Days  0.5				Total Flying Hours on Type Past 90 Days				ast	25.5					
People On-board		1 + 1	Injuries	0	Fata	lities		0		Other	(on	groun	d)	0
What Happe	ned							•						

On Saturday, 18 February 2023, a pilot and a passenger on-board a Piper PA28R 250 aircraft with registration ZS-MUD took off on a private flight from Runway 08 at Silver Creek Airfield in the North West province with the intention to land back at the same airfield. The flight was conducted in accordance with the provisions of Part 91 of the Civil Aviation Regulations (CAR) 2011 as amended.

The pilot reported that prior to the flight, he conducted the pre-flight inspection with no anomalies found. The pilot stated that on his return flight to the airfield during approach for landing whilst the aircraft's speed was approximately 80 miles per hour (MPH), the rain started to fall, reducing visibility. After touch down on Runway 08, the pilot spotted Zebras, approximately 500 metres (m) ahead of the aircraft and applied the brakes. However, the aircraft veered off to the left of the runway and came to a halt in a bushy terrain. The length of Runway 08 is approximately 1300m. The duration of the flight was approximately 0.5 hours. No injuries were reported during this incident, and the aircraft sustained minor damage to the right wing.

The serious incident occurred during daylight at Global Positioning System (GPS) co-ordinates determined to be 25°47'55.42" South 27°31'14.02" East, at an elevation of 4360 feet (ft).

SRP date: 13 June 2023 Publication date: 14 June 2023



Figure 1: The approximate position of the animals on the runway. (Source: Google Earth)



Figure 2: The aircraft as it came to rest post-incident. (Source: Pilot)

The weather information below was obtained from the Meteorological Aerodrome Report (METAR) that was issued by the South African Weather Service (SAWS), recorded on 18 February 2023 at 0900Z at George Dick Montshioa Aerodrome which is located approximately 192 kilometres (km) from the incident site (Silver Creek Airfield).

Wind Direction	020°	Wind Speed	8 knots	Visibility	9999
Temperature	25 °C	Cloud Cover	BKN020	Cloud Base	2000 feet
Dew Point	19°C	QNH	1015 hPa		

The following weather information was obtained from the pilot questionnaire.

Wind Direction	260 °	Wind Speed	8 knots	Visibility	Poor
Temperature	25 °C	Cloud Cover	OVC	Cloud Base	6000 feet
Dew Point	Unknown	QNH	1015 hPa		

#### Surface data:

There are no surface observation tools deployed in Silver Creek Airfield. The George Dick Montshioa Aerodrome (FAMM) METAR showed broken clouds at 2000 feet (ft) above ground before the incident. The 1000Z METAR showed that the conditions persisted with light winds continuing in a north-eastern direction (NE). Light winds are favourable for reduced visibility in the presence of abundant moisture and low-level clouds.

#### **Findings**

The pilot was initially issued a Commercial Pilot Licence (CPL) by the South African Civil Aviation Authority (SACAA) on 14 July 2008.

The CPL was reissued by the SACAA on 11 June 2022 with an expiry date of 30 May 2023. The pilot had flown a total of 9220.1 hours, of which 116.5 hours were on the aircraft type.

The pilot had the aircraft type endorsed on his licence. The pilot had a valid Class 1 aviation medical certificate that was issued on 28 July 2022 with an expiry date of 31 July 2023.

The aircraft was issued a Certificate of Registration (C of R) on 18 February 2018. The Certificate of Airworthiness (C of A) was issued on 21 June 2022 with an expiry date of 20 June 2023.

The Mandatory Periodic Inspection (MPI) was carried out on 8 April 2022 at 6259.62 hours. At the time of the serious incident, the aircraft had a total of 6354.62 hours. The aircraft was flown a further 95 hours since the last MPI.

The aircraft was issued a Certificate of Release to Service (CRS) on 8 April 2022 with an expiry date

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of 7 April 2023 or at 6359.62 hours, whichever occurs first. There were no defects recorded in the flight folio at the time of the incident.

Although the pilot reported poor visibility, the SAWS weather report showed that visibility was greater than 10km.



Figure 3: Aerial view of Silver Creek Airfield. (Source: <a href="https://www.flightlineweekly.com/post">https://www.flightlineweekly.com/post</a>)



Figure 4: The runway at Silver Creek Airfield. (Source: https://www.flightlineweekly.com/post)

It is possible that due to poor visibility, the pilot was unable to see the Zebras on the runway which caused him to apply hard brakes on the wet runway. This caused the aircraft to veer off to the left, and the aircraft came to a stop in a nearby bush.

### **Probable Cause**

During landing on the wet runway, the pilot applied hard brakes which led to loss of control. The aircraft subsequently veered off to the left of the runway before it came to a stop in a nearby bush.

### **Contributing Factor**

Poor airmanship for not carrying out runway inspection.

Animals on the runway.

Poor visibility due to rain.

Wet runway surface.

### Safety Action(s)

None.

### Safety Message

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

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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 produced without prejudice to the rights of the AIID, which are reserved.

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