SOUTH AFRICAN CIVIL AVIATION AUTHORITY

Section/division **Accident and Incident Investigations Division** Form Number: CA 12-57

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10591						
Classification	Accident		**Date**	13 June 2025		**Time**	0839Z
Type of Operation	Private (Part 91)						
Location							
Place of Departure	Private Airstrip, Koppieskraal Pan, Northern Cape Province		Place of Intended Landing	Private Airstrip, Koppieskraal Pan, Northern Cape Province			
Place of Occurrence	Private Airstrip in Koppieskraal Pan, Northern Cape Province						
GPS Co-ordinates	Latitude	26°56'52.12"S	Longitude	20°18'32.27"E	Elevation	2 674 ft	
Aircraft Information							
Registration	ZS-OYW						
Make; Model; S/N	Piper; PA-32R-301T (Serial No: 3257319)						
Damage to Aircraft	Substantial		Total Aircraft Hours	808.9			
Pilot-in-command							
Licence Type	Private Pilot Licence (PPL)		Gender	Male		Age	69
Licence Valid	Yes	Total Hours	746.1	Total Hours on Type	694.8		
Total Hours 30 Days	6.4		Total Flying on Type Past 90 Days	6.4			
People On-board	1+2	**Injuries**	0	**Fatalities**	0	**Other (on ground)**	0

What Happened

On Friday, 13 June 2025, a pilot and two passengers on-board a Piper PA-32R-301T aircraft with registration ZS-OYW were taxiing the aircraft at a private airstrip in Koppieskraal Pan, Northern Cape province, in preparation for a local flight when the accident occurred. The flight was to be conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 91 of the Civil Aviation Regulations (CAR) 2011 as amended.

According to the event organiser, a temporary airstrip with a designated Runway (RWY) 01/19 was prepared in Koppieskraal Pan for a weekend social gathering of general aviation pilots at the Kalahari Bundu Bash. The fly-in event was expected to attract approximately 70 aircraft, with attendees camping at the site. Radio frequency 124.8-Megahertz (MHz) was used in the vicinity for safe aircraft operations amongst pilots. On the morning of 13 June 2025, several aircraft had already arrived and were parked on the left side of RWY 01. A Mogas fuel bowser was arranged for the event with a designated refuelling area located on the right side of RWY 01. The pilot of ZS-OYW had also arrived earlier that morning. At approximately 0800Z, he conducted a pre-flight inspection of the aircraft and did not find any anomalies. The pilot had planned to engage in a local

flight with two other aircraft. After the pre-flight inspections, all three aircraft taxied to RWY 01 for departure.

Meanwhile, the fuel bowser driver was contacted via a cellular phone and instructed to cross over the RWY01 to refuel several other aircraft that had parked on the left side of the runway. The driver, who was positioned on the right side of RWY 01, observed two of the three aircraft that took off and waited approximately 5 minutes to ensure that there was no visible aircraft activity before crossing over the runway. *The driver was not issued a radio to communicate with air traffic during the event or crossing of the runway*. The driver assumed that the runway was clear and proceeded to enter RWY 01. However, shortly thereafter, he observed an aircraft approaching on the runway during its take-off roll.

According to the ZS-OYW pilot, during the take-off roll whilst the aircraft was approximately 400 metres (m) from the threshold, he spotted the fuel bowser as it entered the runway from the right. The pilot attempted to avoid the vehicle by veering slightly to the left but despite the manoeuvre, the aircraft's right wing struck the truck and the aircraft's wing detached from the fuselage. Moreover, the left main landing gear collapsed, and the aircraft skidded on the ground before it stopped on the runway.

The occupants were unable to open the aircraft doors from the inside, thus, the bystanders at the scene forced the doors open from the outside for the pilot and the two passengers to disembark; they were not injured. The aircraft sustained substantial damage.

Figure 1: The accident site. (Source: Google Earth)

Figure 2: The aircraft post-accident. (Source: Pilot)

Figure 3: The impacted fuel truck. (Source: Pilot)

The driver stated that he was qualified and certified to operate a handheld radio for aerodrome operations. However, on the day of the accident, he did not have access to either a vehicle-mounted or handheld radio tuned onto the frequency in use at the event.

The fuel bowser truck was parked in its designated refuelling area. The driver was initially informed that the aircraft parked on the opposite side of the runway would cross over to his side to refuel.

Findings

Pilot

1. The pilot had a Private Pilot Licence (PPL) that was initially issued by the Regulator (SACAA) on 31 March 2017. The latest PPL was reissue on 14 March 2025 with an expiry date of 31 March 2026. The pilot's Class 2 aviation medical certificate was issued on 14 March 2025 with an expiry date of 31 March 2027.

2. The pilot had a total of 746.1 flying hours of which 694.8 hours were accumulated on the aircraft type.

Aircraft

3. The mandatory periodic inspection (MPI) of the aircraft was conducted and certified on 8 April 2025 at 804.0 hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 7 April 2026 or at 904.0 hours, whichever comes first. The aircraft had a total of 808.9 hours at the time of the accident. It had accumulated 4.9 hours following the last MPI.

4. The aircraft had a valid Certificate of Airworthiness (C of A) that was issued by the Regulator on 27 February 2014 with an expiry date of 28 February 2026. The aircraft's Certificate of Registration (C of R) was issued to the current owner on 1 August 2017.

5. The aircraft maintenance organisation (AMO) which conducted the MPI had an AMO Certificate that was issued on 20 July 2024 with an expiry date of 31 July 2025.

Environment

6. Clear weather conditions prevailed at the time of the flight; the weather conditions could not be attributed to the cause of the accident.

Mission

7. The event was held at a temporary, unmanned airstrip with high aircraft movement and no formal ground marshalling in place.

8. There were no existing systems to manage or co-ordinate movement of ground vehicles on the active runway. The fuel truck driver was contacted via a cellular phone as he was not issued a handheld radio or a vehicle with a radio to communicate with the pilots/organisers on the frequency that was used at the event. Although the fuel bowser had a designated area, the driver was requested to cross over the active runway to enable the aircraft on the other side to refuel.

9. The truck driver relied on physical observation with limited view due to blind spots around the area to cross over the active runway.

Probable Cause(s)

The aircraft impacted the fuel bowser truck due to inadequate communication and co-ordination of ground vehicle movement on the active runway.

Contributing Factor(s)

1. Absence of radio communication between aircraft and ground vehicles.
2. Lack of designated person or procedures to control vehicle movement crossing the runway.

Safety Action(s)

None.

Safety Message and/or Safety Recommendation/s

1. It is recommended that organisers of temporary airstrip events equip all ground vehicles, including fuel bowsers, with operational very high frequency (VHF) radios tuned to the event frequency to enable drivers to monitor and co-ordinate with aircraft and ground personnel. A simple, written event safety plan should be developed to define responsibilities, communication channels and operational procedures with all pilots and ground staff briefed before operations begin.

2. It is recommended that designated runway crossing points be established at temporary airstrip events, controlled by a trained marshal in direct radio contact with airborne and taxiing aircraft. Vehicle crossings should only be permitted once the marshal confirms the runway is clear, ensuring safe separation between aircraft operations and ground vehicle movements.

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 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.

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