



LIMITED ACCIDENT INVESTIGATION REPORT
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Reference Number		CA18/2/3/10136					
Classification	Accident	Date	19 March 2022	Time	1000Z		
Type of Operation	Private (Part 91)						
Location							
Place of Departure	Brits Airfield (FABS), North West Province		Place of Intended Landing	Sterkfontein Airfield (Brits), North West Province			
Place of Accident	Runway (RWY) 02 at Sterkfontein Airfield						
GPS Co-ordinates	Latitude	26° 2' 50.81"S	Longitude	27° 42' 7.66"E	Elevation	5 040 feet	
Aircraft Information							
Registration	ZS-FSH						
Make/Model	Oscar Partenavia P64B (Serial Number: 39)						
Damage to Aircraft	Substantial		Total Aircraft Hours	1904.8			
Pilot-in-command							
Licence Type	Private Pilot Licence	Gender	Male	Age	83		
Licence Valid	Yes						
Total Hours on Type	74.1		Total Flying Hours	1288.8			
People On-board	1 + 0	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened							
<p>On 19 March 2022, a pilot on-board a P64B Oscar Partenavia aircraft with registration ZS-FSH was on a private flight from Brits Airfield (FABS) in the North West province, to Sterkfontein Airfield in the same province. The flight was conducted under visual flight rules (VFR) by day and under the provisions of Part 91 of the Civil Aviation Regulations (CAR) 2011 as amended.</p> <p>The pilot stated that he landed safely on Runway 02 at Sterkfontein Airfield, which is a grass runway. However, whilst taxiing the aircraft to the hangar, the nose landing gear (NLG) got caught in a mongoose burrow, causing it to bend backwards and as a result, the propeller struck the ground. Thereafter, the pilot shut down the engine and disembarked the aircraft to inspect it. He later towed the aircraft to the hangar.</p> <p>The damage to the aircraft was limited to the propeller, firewall and the nose landing gear. The pilot was not injured during the accident.</p>							



Figure 1: The damaged propeller and nose landing gear.



Figure 2: Damage on the nose landing gear.

What was found:

- The pilot was issued a Private Pilot Licence (PPL) on 29 October 1992. His last validation was on 20 December 2021 with an expiry date of 31 December 2022. A P64B Oscar rating was endorsed on his licence. His Class 2 medical certificate was issued on 4 December 2021 with an expiry date of 31 December 2022.
- According to the pilot's questionnaire, this was a private flight.
- The aircraft was issued an Authority to Fly (ATF) certificate on 11 October 2019 with an expiry date of 30 November 2022. The aircraft's Certificate of Registration was issued to the current owner on 5 April 2019.
- According to the pilot's questionnaire, the last annual inspection was carried out on 23 September 2021 at 1892.83 airframe hours. At the time of the accident, the aircraft had accumulated an additional 12.05 airframe hours in operation since the last inspection. There were no reported or recorded defects prior to the accident; the only damages sustained by the aircraft were related to the accident.
- During an on-site investigation, which was five days after the accident, it was found that the Sterkfontein Airfield is registered and has three runways: 02/20, 15/33 and 11/29. The airfield is located in the middle of a 220 hectares (ha) farm. Runway 02/20 is 700 metres (2297 feet) in length and 11m (36 ft) in width. Whilst Runways 15/33 and 11/29 are 1000m (3281ft) in

length and 11m (36 ft) in width each. The airfield is not fenced or walled, and mongoose burrows are scattered on all the runways (farm).

- Figure 2 shows grass in the scoop located under the aircraft's nose section, which indicates that the nose wheel must have sunk into the mongoose burrow.
- The pilot further reported that he inspected the airfield on a regular basis for mongoose burrows. He stated that in instances where he found the mongoose burrows, he would close them before undertaking the flight. However, on his return, he would find that the mongoose have dug up the burrows again.



Figure 3: Position of the aircraft on the runway. (Source: Google Earth)



Figure 4: Mongoose burrows on one of the runways.



Figure 5: Propeller marks on the ground.

Probable cause:

The nose landing gear (NLG) got caught in a mongoose burrow, resulting in a propeller striking the ground.

Safety Action/s	
None.	
Safety Message and/or Safety Recommendation/s	
None.	
Purpose of the Investigation	
<i>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.</i>	
About this Report	
<p><i>Decisions regarding whether to investigate, and the scope of an investigation are based on many factors, including the level of safety benefit likely to be obtained from an investigation. For this occurrence, no 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 brief report. The report has been compiled using information supplied in the initial notification, as well as follow-up information 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 accident.</i></p> <p><i>This report provides an opportunity to share safety message/s in the absence of an investigation.</i></p> <p><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></p>	
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**