



LIMITED OCCURRENCE INVESTIGATION REPORT

Reference Number		CA18/3/2/1528						
Classification		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Serious Incident</td> <td style="width: 25%;">Date</td> <td style="width: 25%;">7 February 2026</td> <td style="width: 25%;">Time</td> <td style="width: 20%;">1530Z</td> </tr> </table>	Serious Incident	Date	7 February 2026	Time	1530Z	
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Type of Operation		Private (Part 94)						
Location								
Place of Departure		Orient Airfield (FAOI), Gauteng Province		Place of Intended Landing		Orient Airfield (FAOI), Gauteng Province		
Place of Occurrence		Orient Airfield (FAOI), Gauteng Province						
GPS Co-ordinates		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Latitude</td> <td style="width: 25%;">26° 02' 16.51" S</td> <td style="width: 25%;">Longitude</td> <td style="width: 25%;">27° 35' 42.55" E</td> <td style="width: 20%;">Elevation</td> <td style="width: 20%;">5 100ft</td> </tr> </table>	Latitude	26° 02' 16.51" S	Longitude	27° 35' 42.55" E	Elevation	5 100ft
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Aircraft Information								
Registration		ZU-DUI						
Make; Model; S/N		TL Ultralight; TL-2000 Sting (Serial Number: 05 ST 110)						
Damage to Aircraft		Substantial		Total Aircraft Hours		1148.35		
Pilot-in-command								
Licence Type		Private Pilot Licence (PPL)		Gender	Male	Age	69	
Licence Valid		Yes	Total Hours		6 000	Total Hours on Type	50	
Total Hours 30 Days		7.7	Total Flying on Type Past 90 Days			20		
People On-board		1 + 0	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened								
<p>On Saturday, 7 February 2026, a pilot on-board a TL Ultralight TL-2000 light sport aircraft with registration ZU-DUI took off from Orient Airfield (FAOI) in Magaliesberg, Gauteng province, with the intention to land at the same airfield. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 94 of the Civil Aviation Regulations (CAR) 2011, as amended.</p> <p>The pilot reported that he conducted a pre-flight inspection of the aircraft and no anomalies were noted. He took off from FAOI Runway 36 to Magaliesberg general flying area (GFA) for approximately 20 minutes before returning to FAOI. Upon reaching FAOI, the pilot communicated his intentions and commenced with the approach to land on Runway 36 at 65 knots (kts) and with the flaps at 10°. According to the pilot, touchdown was normal; however, during the landing roll, the nose gear strut broke. As a result, the aircraft's nose pitched down, and the propeller struck the ground.</p> <p>The pilot reported that during landing, the aircraft had approximately 50 litres of Mogas remaining in the tanks. The aircraft sustained substantial damage; the pilot was not injured.</p>								



Figure 1: The aircraft at the serious incident site. (Source: Pilot)

Post-serious incident examination of the aircraft by an approved person (AP) revealed that the nose gear shear bolt fractured, which led to loss of structural integrity. The nose landing gear assembly detached as a direct consequence of the shear bolt failure. There was no evidence of pre-existing defects in materials. The failure was consistent with progressive fatigue or overload stress caused by repeated operation on rough surfaces.

Aircraft Maintenance

The last maintenance schedule of the aircraft was conducted on 20 January 2025 at 998.59 airframe hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 19 January 2026 or at 1098 airframe hours, whichever comes first. The aircraft had a total of 999 airframe hours; it had accumulated 1-hour flight time since the last maintenance inspection. The CRS had expired at the time of the flight, which deemed the aircraft airworthiness to be invalid despite the valid ATF.

Civil Aviation Regulations Part 44

Annual Inspections

44.01.6 (1) *A non-type certificated aircraft, specified in regulation 24.01.1 (1) and classified in paragraphs (a) to (g) of regulation 24.01.1 (2) shall undergo an annual inspection no later than 365 days since the previous annual inspection, or an inspection equivalent to an annual inspection, was carried out.*



Figure 2: The failed shear bolt.



Figure 3: The close-up picture of the failed shear bolt.

Findings

Pilot

1. The pilot had a Private Pilot Licence (PPL) that was initially issued by the Regulator (SACAA) on 3 May 1989. The PPL was renewed on 22 August 2024 with an expiry date of 31 August 2026.
2. The pilot had a Class 2 aviation medical certificate that was issued on 22 August 2024 with an expiry date of 31 August 2026.
3. The pilot had a total of 6 000 flying hours of which 20 hours were accumulated on the aircraft type. The aircraft type was endorsed in his licence.

Aircraft

4. The aircraft had an Authority-to-Fly (ATF) Certificate that was initially issued on 29 February 2020. The ATF was renewed on 3 March 2025 with an expiry date of 28 February 2026.
5. The aircraft Certificate of Registration (C of R) was issued to the present owner on 14 August 2025.
6. The last maintenance schedule of the aircraft was conducted on 20 January 2025 at 998.59 airframe hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 19 January 2026 or at 1098 airframe hours, whichever comes first. The aircraft had a total of 999 airframe hours; it had accumulated 1-hour flight time since the last maintenance inspection.
7. At the time of the flight, the Certificate of Release to Service (CRS) had expired; therefore, the aircraft was not airworthy despite having a valid Authority-to-Fly (ATF) Certificate. There were no records which showed that the aircraft had undergone an annual inspection within a year (365 days) as prescribed in the applicable regulatory requirements.
8. Maintenance of the aircraft was conducted by an approved person (AP) who had a valid AP Certificate that was issued by the Regulator on 26 September 2024 with an expiry date of 25 September 2026. The aircraft was endorsed in the AP's operational specifications.
9. The aircraft's nose landing gear collapsed as soon as it touched the ground during landing.
10. The aircraft landed at a speed of 65 kts, which was consistent with the recommended speed in the Pilot's Operating Handbook [POH]; however, the flaps were set at 10° less than the recommended setting.

11. There was no evidence to confirm the pre-existing mechanical defects with the landing gear.
Probable Cause(s)
The aircraft's nose landing gear collapsed during the landing roll due to excessive loading, followed by the nose wheel contacting the grass-covered runway.
Contributing Factor(s)
None.
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 desk top 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.</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**