



LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10594						
Classification	Accident		Date	3 August 2025		Time	0932Z
Type of Operation	Private (Part 94)						
Location							
Place of Departure	Worcester Airport (FAWC), Western Cape Province		Place of Intended Landing	Worcester Airport (FAWC), Western Cape Province			
Place of Occurrence	Theewaterskloof Local Municipality, Western Cape Province						
GPS Co-ordinates	Latitude	34° 08' 33.10" S	Longitude	19° 03' 06.41" E	Elevation	650 ft	
Aircraft Information							
Registration	ZT-GAE						
Make; Model; S/N	DG Flugzeugbau; DG800B (S/N: 8-87B23)						
Damage to Aircraft	Substantial			Total Aircraft Hours	1985		
Pilot-in-command							
Licence Type	Glider Pilot Licence (GPL)		Gender	Male		Age	73
Licence Valid	Yes	Total Hours	1983.4		Total Hours on Type	1068	
Total Hours 30 Days	8.2		Total Flying on Type Past 90 Days	16.7			
People On-board	1+0	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened							
<p>On Sunday, 3 August 2025, a DG Flugzeugbau DG800B motorised glider with registration ZT-GAE took off from Worcester Airport (FAWC) in Western Cape province with the intention to land back at the same airport. The pilot was the sole occupant on-board. 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>According to the pilot, he conducted a pre-flight inspection with no anomalies noted; the glider took off from Runway (RWY) 33. Once the pilot reached the desired height, he switched off the engine. Approximately 44 nautical miles (nm) from FAWC and 650 feet (ft) above ground level (AGL), the glider lost some altitude. To regain altitude, the pilot extended and started the sustainer engine at an indicated airspeed of approximately 80 knots (kts); however, this initiative was unsuccessful. He then scanned the area and identified a soccer field on which to conduct an outlanding. He inspected the soccer field and, thereafter, committed to land. At 49 ft AGL, the right wing hit some fruit trees along the soccer field which caused the glider to turn 90 degrees to the right and impact a fence before it touched the ground. After landing, the pilot checked the fuel in the tanks and found approximately 19 litres (l).</p>							

The pilot was not injured after the accident. The glider sustained damage to the wings, canopy (which broke off) and the fuselage.



Figure 1: The red star depicts the aircraft's final position after the accident. (Google Earth)



Figure 2: The aircraft after impact. (Source: Pilot)



Figure 3: The rear view of the aircraft post-accident. (Source: Pilot)

Meteorological Information (Source: South African Weather Service)

Wind Direction	NW	Wind Speed	25 Kts	Visibility	10 Km
Temperature	22.4°C	Cloud Cover	FEW	Cloud Base	Unknown
Dew Point	Unknown	QNH	988.3 hPa		

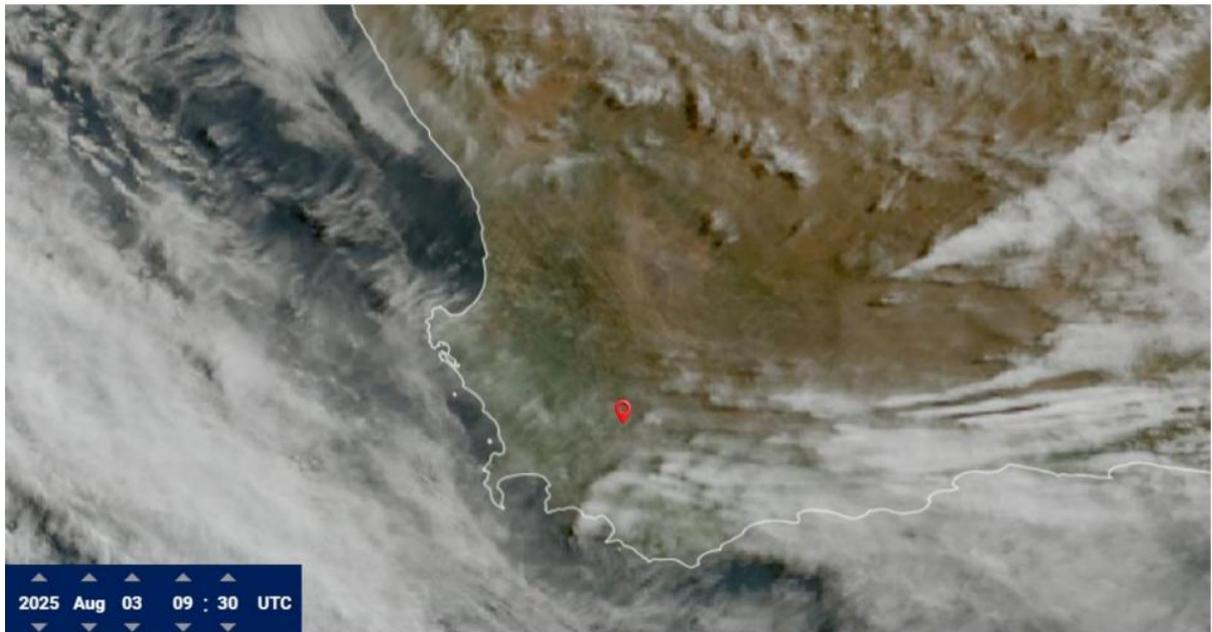


Figure 2: The MeteoSat Third Generation (MTG) True Colour RGB satellite imagery was taken at 09:30 Z on 03 August 2025 (copyright Eumetsat).

The satellite imagery above indicates that there were no significant clouds; only high-level clouds at the time of the accident. The forecast indicated the possibility of severe mountain waves and turbulence from the surface to about 8000 ft, as well as moderate turbulence between 18000 ft and

24000 ft. A warning was issued about severe mountain waves forecasted nearest to the area (site) and time of the accident.

Mountain Waves (Source: <https://skybrary.aero/articles/mountain-waves>)

Mountain Waves are defined as oscillations to the lee side (downwind) of high ground resulting from the disturbance in the horizontal air flow caused by the high ground.

Mountain Waves are associated with severe turbulence, strong vertical currents, and icing. Loss of Control can also occur near to the ground prior to landing or after take-off with a risk of terrain contact or a hard landing if crew corrective response to a downdraft is not prompt.

Engine Restart Procedure In-flight (Source: Flight Manual DG 800B)

Extend the engine by switching on the ignition; when engine is extended, increase speed as quickly as possible to approximately 175 km/h (95 kts) until the engine starts. Then flare out with max. 2 g. From the beginning of the dive to the lowest point of the procedure, you need approximately 150m (500 ft). Therefore, you should not start this procedure below 400m (1320 ft) above ground. Otherwise a safe outlanding is preferable.

Findings

1. Pilot

- 1.1. The pilot had a Glider Pilot Licence (GPL) that was issued by the Regulator (SACAA) on 17 May 2025 with an expiry date of 16 May 2027. The pilot's Class 2 aviation medical certificate was issued on 8 August 2023 with an expiry date of 28 February 2026.
- 1.2. The pilot had a total of 1985 flying hours of which 1005.6 hours were accumulated on the glider type.

2. Motorised Glider

- 2.1. The latest annual inspection of the glider was conducted and certified on 29 May 2025 at 1983.3 hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 28 May 2026 or at 2083.3 hours, whichever comes first. The glider had a total of 1985 hours at the time of the accident; it had accumulated a total of 1.7 hours since the said inspection.

- 2.2. The glider had a valid Authority-to-fly (ATF) Certificate that was issued by the Regulator on 30 April 2019 with an expiry date of 30 April 2026. The glider's Certificate of Registration (C of R) was issued to the current owner on 10 January 2019.
- 2.3. The approved person (AP) who maintained the glider had an AP Certificate that was issued on 30 October 2024 with an expiry date of 31 October 2025.

3. Environment

- 3.1. The weather conditions indicated a possibility of severe mountain waves and turbulence from the surface to about 8000 ft.

4. Mission

- 4.1. The glider was operated in engine-off configuration during cruise whilst flying at approximately 650 ft AGL. It encountered turbulent conditions and sunk severely, which resulted in a rapid and significant loss of altitude.
- 4.2. The pilot attempted to regain altitude by extending and starting the sustainer engine at an indicated airspeed of approximately 80 kts. The glider flight manual specifies that the in-flight engine restart procedure requires a dive to gain a speed of approximately 95 kts, which would result in approximately 500 ft loss of altitude. The manual also specifies that this procedure should not be initiated below approximately 1 320 ft AGL.

Probable Cause(s)

Unsuccessful outlanding following a loss of lift during flight after the glider encountered turbulence.

Contributing Factor(s)

The glider's low altitude prevented a successful sustainer engine restart.

Safety Action(s)

None.

Safety Message and/or Safety Recommendation/s

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 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

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This report is issued by:

**Accident and Incident Investigations Division
South African Civil Aviation Authority
Republic of South Africa**