

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10468						
Classification	Accident	Date	2 July 2024		Time	0810Z	
Type of Operation	Private (Part 94)						
Location							
Place of Departure	Groutville Aerodrome, KwaZulu-Natal Province		Place of Intended Landing	Groutville Aerodrome, KwaZulu-Natal Province			
Place of Occurrence	In the Hlimbitwa River near Blythedale Beach in KwaZulu-Natal Province						
GPS Co-ordinates	Latitude	29°22'53.97" S	Longitude	031°19'54.95" E	Elevation	20 feet	
Aircraft Information							
Registration	ZU-CCJ						
Make; Model; S/N	Solo Wings; Windlass Aquilla (Serial Number: WA814)						
Damage to Aircraft	Substantial		Total Aircraft Hours	425.6			
Pilot-in-command							
Licence Type	National Pilot Licence		Gender	Male		Age	47
Licence Valid	Yes	Total Hours	97.9		Total Hours on Type	28.7	
Total Hours 90 Days	10.3		Total Hours on Type Past 90 Days	10.3			
People On-board	1 + 1	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened							
<p>On Tuesday morning, 2 July 2024, a pilot and a passenger on-board a Windlass Aquilla microlight aircraft took off on a private flight from Groutville Aerodrome which is located next to the N2 highway near Mvoti Toll Plaza in KwaZulu-Natal province. The pair intended to return to the same take-off aerodrome. 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 stated that he refuelled the microlight aircraft with Mogas to a 45-litre level and, thereafter, performed the pre-flight inspection. After briefing his passenger, he proceeded with the engine run-up checks. The surface wind at the time was from the north-west at 3 knots (kts). At 0745Z, he took off towards the north and climbed to 500 feet (ft) above ground level (AGL) and turned right towards the coastline. After reaching the coastline, the pilot turned left and continued north. Once abeam the Hlimbitwa River, he turned left (inland) and descended low, following the course of the river. From the aerial picture (see Figure 2), the river makes several turns before it flows into the sea. As the pilot was following the contour of the river at low level, he applied full power (by depressing the throttle with his right foot). The microlight aircraft was slow to respond to the power input and the left wing dropped and contacted the water. The pilot lost control of the microlight aircraft and crashed into the river. The area of the crash had shallow water. The pilot and the passenger were not injured; they unlatched the safety harnesses, evacuated the microlight aircraft and walked to the riverbank.</p>							

The pilot noticed that fuel was leaking into the river, and he initiated an immediate recovery. The microlight aircraft sustained substantial structural damage.

The accident occurred during daylight at Global Positioning System (GPS) co-ordinates determined to be 29°22'53.76" South 031°19'56.03" East, at an elevation of 20 feet (ft).

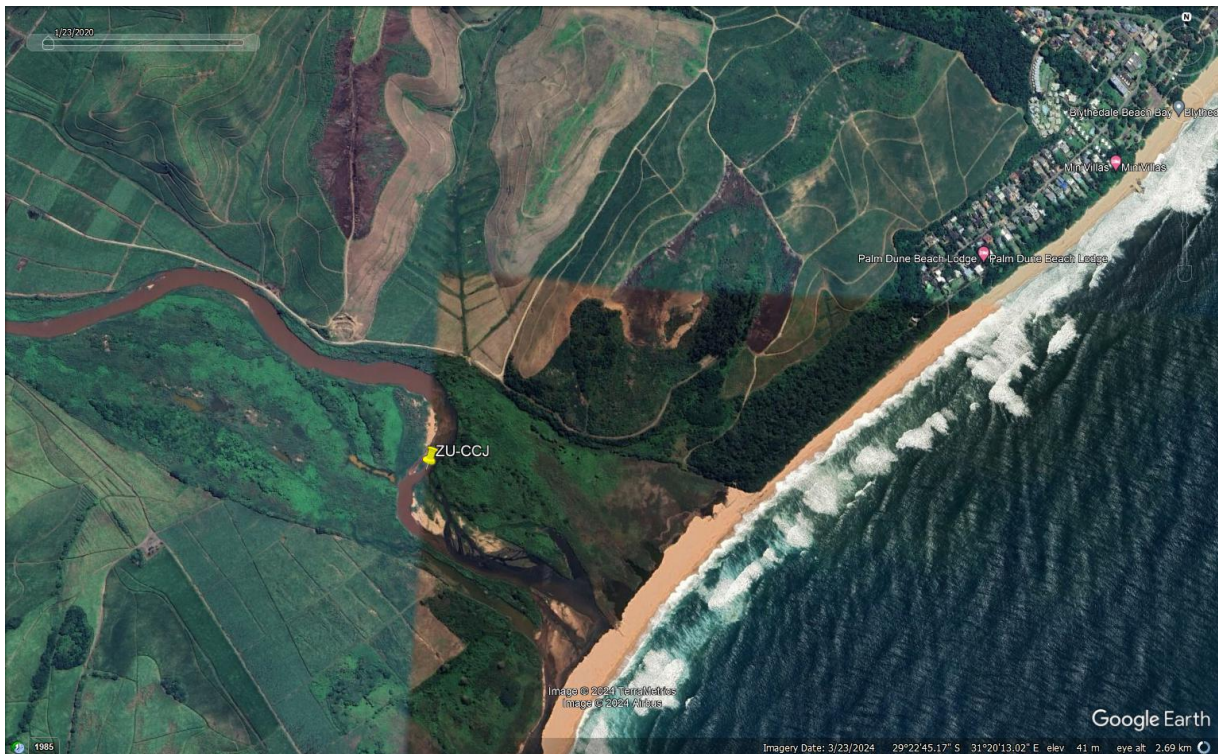


Figure 1: The microlight aircraft accident site indicated by the yellow pin in Hlimbitwa River.
(Source: Google Earth)



Figure 2: An aerial view of a section of the river where it flows into the sea.



Figure 3: An aerial view of the microlight aircraft in the river.



Figure 4: The microlight aircraft in the river after the accident. (Source: Pilot)



Figure 5: Two of the three propeller blades were severed. (Source: Pilot)

Meteorological Information

The weather information entered in the table below was obtained from the pilot questionnaire.

Wind Direction	310°	Wind Speed	3 knots	Visibility	9999 m
Temperature	21°C	Cloud Cover	CAVOK	Cloud Base	Nil
Dew Point	Unknown	QNH	Unknown		

Findings

1. Personnel Information

- 1.1 The pilot had a National Pilot Licence (NPL) that was initially issued by the Regulator (SACAA) on 5 April 2023 with an expiry date of 8 November 2024. The pilot had flown a total of 97.9 hours with 28.7 of the hours accumulated on weight-shift microlight (WCM) aircraft.
- 1.2 The pilot was issued a Class 2 aviation medical certificate on 28 June 2022 with an expiry date of 30 June 2027.
- 1.3 The pilot was required to wear corrective lenses when flying as prescribed in his aviation medical certificate.

2. Microlight Aircraft Information

- 2.1 The last annual inspection that was conducted on the microlight aircraft before the accident flight was certified on 15 June 2024 at 413.7 airframe hours. The microlight aircraft accrued 11.9 hours since the last inspection.
- 2.2 The microlight aircraft had a valid Authority to Fly (ATF) that was initially issued on 14 December 2009. The latest ATF had an expiry date of 4 September 2024.
- 2.3 The microlight aircraft's Certificate of Registration (C of R) was issued to the present owner on 20 February 2023.
- 2.4 The microlight aircraft was issued a Certificate of Release to Service (CRS) on 15 June 2024 with an expiry date of 4 September 2024 or at 513.7 airframe hours, whichever occurs first.
- 2.5 The pilot stated that there was no mechanical or electrical malfunction with the microlight aircraft that could have contributed to or have caused the accident.
- 2.6 The microlight aircraft was flying at a low level before the air speed decayed; the left wing stalled, and it impacted the water.

3. Meteorological Information

- 3.1 Fine weather conditions prevailed at the time of the flight; the weather had no bearing to this accident.

Probable Cause(s)
The microlight aircraft was flown at a low height and speed before it stalled and crashed into the river.
Contributing Factor(s)
(i) The pilot had limited flying hours on weight-shift microlight aircraft; he applied power late to prevent a stall. (ii) The pilot had inadequate height available to recover from the stall as he was flying at a low level.
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 desktop inquiries 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**