

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10399						
Classification	Accident	Date	9 December 2023	Time	0730Z		
Type of Operation	Private (Part 94)						
Location							
Place of Departure	Yorkville Airstrip in Kamberg, KwaZulu-Natal Province		Place of Intended Landing	Farm near Ladysmith, KwaZulu-Natal Province			
Place of Occurrence	Hill side, Nottingham, KwaZulu-Natal Province						
GPS Co-ordinates	Latitude	29°27'41.21" S	Longitude	029°52'59.87" E	Elevation	5 632 feet (ft)	
Aircraft Information							
Registration	ZU-IVW						
Make; Model; S/N	Savanna S (Serial Number: 21-06-54-0792)						
Damage to Aircraft	Substantial		Total Aircraft Hours	210			
Pilot-in-command							
Licence Type	National Pilot Licence (NPL)		Gender	Male	Age	64	
Licence Valid	Yes	Total Hours	903.7	Total Hours on Type	457		
Total Hours Past 30 Days	13		Total Flying Hours on Type Past 90 Days	37			
People On-board	1 + 1	Injuries	2	Fatalities	0	Other (on ground)	0
What Happened							
<p>On Saturday, 9 December 2023, a pilot and a passenger on-board a Savannah aircraft with registration ZU-IVW took off on a private flight from Yorkville Airstrip with the intention to land on a farm near Ladysmith. 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 took off from Yorkville Airstrip (Pin number 1, Figure 2) to a farm near Ladysmith, located north of the departure airstrip. The pilot flew towards Ntabamhlophe area (Pin number 2, Figure 2) where they encountered low clouds and mist. The pilot then elected to turn right and away from the clouds as he was not instrument rated. He stated that he intended to make a turn of approximately 15 degrees away from Ntabamhlophe Mountain Range, however, after making the turn, the aircraft was engulfed in the mist because the weather conditions had become extremely poor (deteriorated) in the vicinity of the aircraft. The pilot stated that he became disorientated and decided to switch on his navigation device as he had not switched it on before departure because he was familiar with the area. When the navigation device was switched on, it showed that the aircraft was 180 degrees off course and in a valley. He then tried to get out of the poor weather conditions by attempting to turn back; however, as he initiated a right turn (to turn back), he flew into the side</p>							

of the mountain approximately 19.19 nautical miles south-east of the departure airstrip (Pin number 3, Figure 2).

The pilot was seriously injured and was taken to a hospital in Pietermaritzburg; the passenger sustained minor injuries. The aircraft was substantially damaged during the accident.

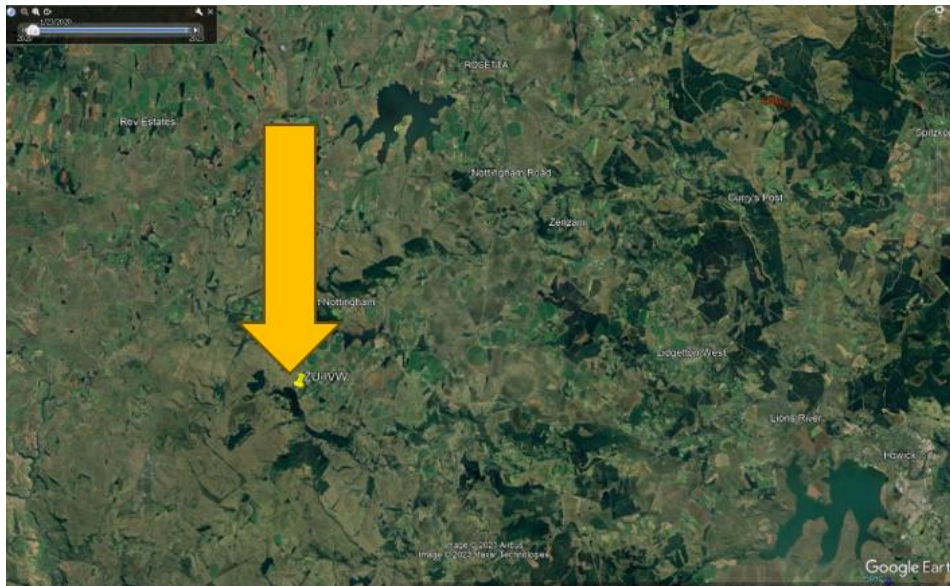


Figure 1: The yellow arrow and pin depict the accident site. (Source: Google Earth)

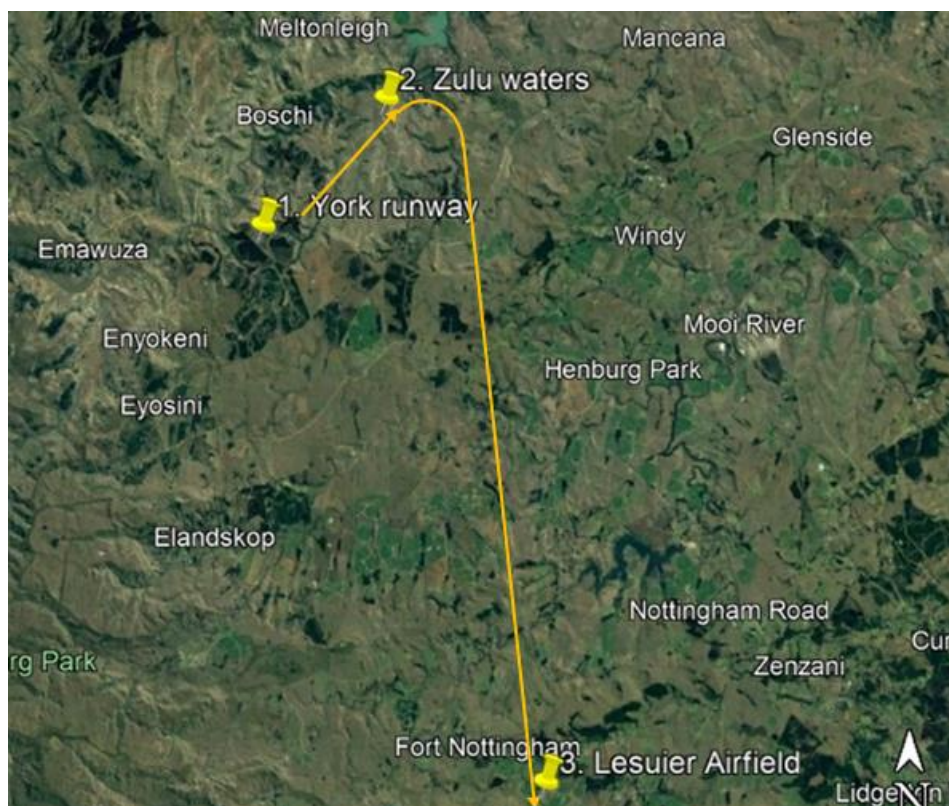


Figure 2: The route flown by the pilot. (Source: Google Earth)



Figure 3: The resting position of the aircraft post-accident. (Source: SAPS)



Figure 4: Close-up view of the damage post-accident. (Source: SAPS)

Wind Direction	120°	Wind Speed	3 knots	Visibility	7000m
Temperature	19°C	Cloud Cover	BKN	Cloud Base	700ft
Dew Point	17°C	QNH	1014		

Figure 5: The weather information. (Source: South African Weather Service)

The weather information in the table above was obtained from the Pietermaritzburg Airport (FAPM) weather station and details the weather conditions at FAPM on 9 December 2023 at 0700Z.

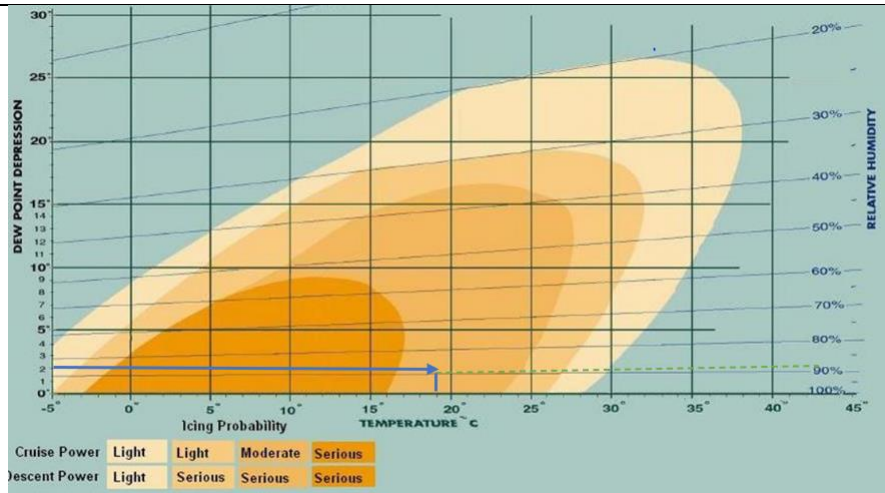


Figure 6: Carburettor Icing Probability Chart.

(Source:<https://alaskafloatratings.com/float-flying-journal/what-is-carburetor-icing/>)

Although carburettor icing was not a factor in this accident, there was 89% relative humidity and a moderate icing probability at cruise power setting with a serious icing probability at descent power setting.

Findings

1. The pilot was issued a National Pilot Licence (NPL) on 28 July 2006. The licence was re-issued on 17 July 2022 with an expiry date of 16 July 2024.
2. The pilot was issued a Class 4 aviation medical certificate on 6 July 2023 with an expiry date of 31 July 2026, and with the restriction to wear corrective lenses.
3. The pilot was not instrument rated; he entered instrument meteorological conditions and flew into rising terrain.
4. The aircraft was issued an Authority to Fly (ATF) on 28 January 2022. The ATF was reissued on 12 December 2022 with an expiry date of 27 January 2024.
5. The aircraft was issued a Certificate of Registration (C of R) on 8 December 2021.
6. The aircraft was issued a Certificate of Release to Service (CRS) on 9 November 2023 with an expiry date of 8 November 2024 or at 300 hours, whichever occurs first. There were no reported or recorded defects prior to the accident flight.
7. The pilot did not plot his route on his navigation device as he was familiar with the area.

8. The pilot lost his track after flying into poor weather conditions; he turned the aircraft to the right in an attempt to make a turn back and flew into the side of the mountain.
Probable Cause
The pilot inadvertently flew from VMC into IMC and became disoriented; in an attempt to get out of the IMC conditions, he flew the aircraft into the side of the mountain.
Contributing Factor(s)
<ul style="list-style-type: none"> • Failure to obtain the weather report for en route and destination weather conditions. • Lack of flight planning.
Safety Action(s)
None.
Safety Message
In the interest of safety and to prevent injury or damage to property, pilots are advised to ensure that they obtain weather information of their en route and destinations weather conditions, as well as plan accordingly.
About this Report
<p><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 safety action/s that the industry might want to consider in preventing a recurrence of a similar occurrence.</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>
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