

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10510						
Classification	Accident	Date	8 October 2024		Time	0710Z	
Type of Operation	Private (Part 94)						
Location							
Place of Departure	Panorama Aerodrome, Gauteng Province		Place of Intended Landing	Thabazimbi Aerodrome (FATI), Limpopo Province			
Place of Occurrence	Runway (RWY) 07 at Thabazimbi Aerodrome (FATI), Limpopo Province						
GPS Co-ordinates	Latitude	24° 34' 39" S	Longitude	027° 24' 59" E	Elevation	3 215 ft	
Aircraft Information							
Registration	ZU-TAE						
Make; Model; S/N	Airplane Factory; Sling 2; (S/N:004)						
Damage to Aircraft	Substantial		Total Aircraft Hours	1 995			
Pilot-in-command							
Licence Type	Private Pilot Licence (PPL)		Gender	Male		Age	39
Licence Valid	Yes	Total Hours	57.9		Total Hours on Type	34.4	
Total Hours 30 Days	8.1		Total Flying on Type Past 90 Days	1.6			
People On-board	1 + 0	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened							
<p>On Tuesday, 8 October 2024, a pilot on-board a Sling 2 aircraft with registration ZU-TAE was on a private flight from Panorama Aerodrome, Gauteng province, to Thabazimbi Aerodrome (FATI) in Limpopo province. 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 conducted the pre-flight checks, and no anomalies were noted. The aircraft took off from Panorama Aerodrome at approximately 0528Z; the flight to FATI was uneventful. Upon arrival at FATI at approximately 0650Z, the pilot requested the weather update from another pilot who was departing the aerodrome. The runway (RWY) in use was RWY 07 and the wind was blowing north-westerly with gusts. On final approach, with the flaps selected to the maximum 40 degrees, the aircraft encountered a gust of wind from the left.</p> <p>The pilot stated that he opened the throttle to full power with the intention to perform a go-around. The aircraft climbed momentarily but shortly after started to sink and impacted the ground before it veered off to the left of the runway. The aircraft skidded for approximately 60 metres (m) before it came to rest facing east. The pilot was unharmed during the accident sequence. The aircraft sustained substantial damage to the left wing, propeller blades and engine cowling.</p>							



Figure 1: An overview of FATI and the accident site. (Source: Google Earth)



Figure 2: The aircraft as it came to rest. (Source: Pilot)

An official weather report was obtained from the South African Weather Service (SAWS) that was issued for FATI on 8 October 2024.

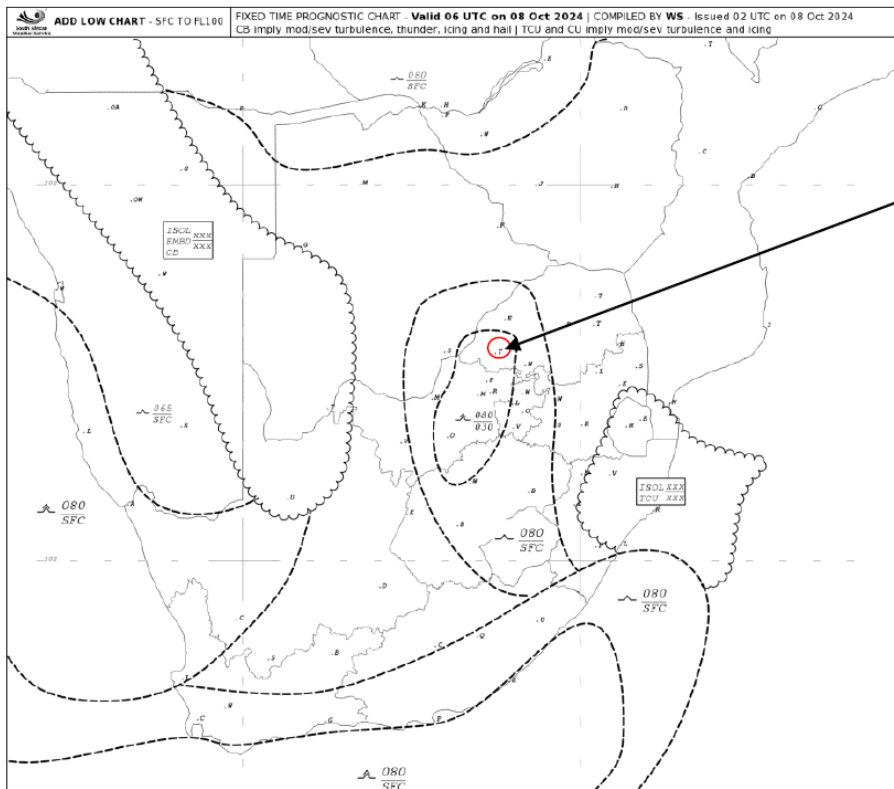


Figure 3: An extract from the accident report showing severe turbulence. (Source: SAWS)

The following weather report was obtained from the pilot questionnaire which he received from another pilot who was departing from the aerodrome:

FATI 080700Z AUTO 35014G26KT CAVOK 29/01 Q1017=

Wind Direction	350°	Wind Speed	6 G19 kt	Visibility	9999 m
Temperature	29°C	Cloud Cover	CAVOK	Cloud Base	CAVOK
Dew Point	1°C	QNH	1017hPa		

Aircraft Performance: Crosswind (Source: Pilot's Operating Handbook (POH))

The aircraft's maximum demonstrated crosswind component is 15 knots (kts). The crosswind component at the time of the accident was calculated to be approximately 18 kts, which was above the 15 kts limit.

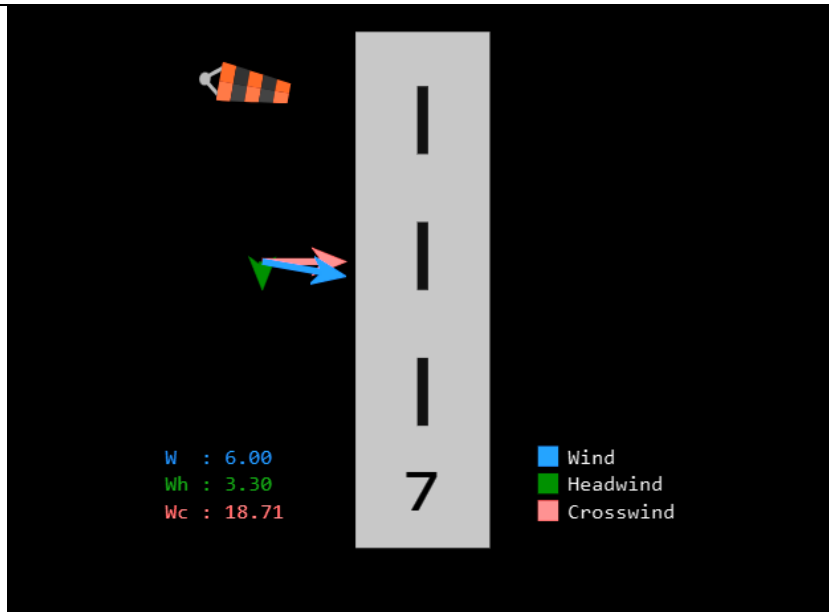


Figure 4: An illustration of the approximate wind conditions with an 18.71 crosswind from the left during landing. (Source: <https://e6bx.com/wind-components/>)

Findings

1. Personnel Information

- 1.1 The pilot was issued a Private Pilot Licence (PPL) on 19 September 2024 with an expiry date of 30 September 2025.
- 1.2 The pilot was issued a Class 2 aviation medical certificate on 31 July 2023 with an expiry date of 31 July 2027 with no restrictions. The pilot was adequately qualified and licensed for the flight; he had a total of 34.4 hours on the aircraft type and had flown 1.6 hours in the preceding 90 days.

2. Aircraft Information

- 2.1 The last mandatory periodic inspection (MPI) of the aircraft was conducted and certified on 26 June 2024 at 1 950.6 airframe hours. The aircraft was flown a further 44.4 hours after the said inspection.
- 2.2 The aircraft had a valid Authority-to-fly (ATF) Certificate that was initially issued on 27 February 2020. The ATF was renewed on 31 July 2024 with an expiry date of 30 July 2025. The aircraft's Certificate of Registration (C of R) was issued to the present owner on 29 November 2022.
- 2.3 The aircraft was issued a Certificate of Release to Service (CRS) on 24 July 2024 with an expiry date of 28 February 2025 or at 2295.1 airframe hours, whichever occurs first.

2.4 The aircraft was maintained by an aircraft maintenance organisation (AMO) with an AMO Certificate that was issued by the Regulator (SACAA) on 17 December 2023 with an expiry date of 31 December 2024.

2.5 The aircraft veered off to the left of the runway probably due to turbulent wind conditions; this resulted in the left-wing tip contacting the ground and, subsequently, the pilot's loss of control of the contract.

3. Environment

The weather reported to the pilot before approach to land was consistent with the report obtained from the SAWS which forecasted turbulent surface wind conditions during the flight; therefore, the weather is a contributory factor to this accident.

Probable Cause(s)
Loss of directional control during landing due to excessive crosswind conditions, which subsequently led to the aircraft veering off to the left of the runway.
Contributing Factor(s)
Turbulent wind conditions.
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**