

**LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL**

<b>Reference Number</b>	CA18/2/3/10425						
<b>Classification</b>	Accident	<b>Date</b>	23 February 2024	<b>Time</b>	0825Z		
<b>Type of Operation</b>	Private (Part 91)						
<b>Location</b>							
Place of Departure	Garonga Airfield (in Makalali Game Reserve), Limpopo Province		Place of Intended Landing	Zandspruit Bush & Aero Estate, Limpopo Province			
Place of Occurrence	Runway 35 at Zandspruit Bush & Aero Estate						
GPS Co-ordinates	Latitude	24°22'23" S	Longitude	030°55'39" E	Elevation	1700 feet (ft)	
<b>Aircraft Information</b>							
Registration	F-PAFR						
Make; Model; S/N	Murphy Rebel Elite (Serial Number: 746)						
Damage to Aircraft	Substantial		Total Aircraft Hours	765			
<b>Pilot-in-command</b>							
Licence Type	Airline Transport Pilot Licence (ATPL)		Gender	Male		Age	73
Licence Valid	Yes	Total Hours	17 494		Total Hours on Type	765	
Total Hours past 30 Days	0.3		Total Flying Hours on Type Past 90 Days	20			
<b>People On-board</b>	1 + 1	<b>Injuries</b>	0	<b>Fatalities</b>	0	<b>Other (on ground)</b>	0
<b>What Happened</b>							
<p>On Friday morning, 23 February 2024, a pilot and a passenger on-board a Murphy Rebel Elite aircraft with registration F-PAFR took off on a private flight from Zandspruit Bush &amp; Aero Estate in Limpopo province to Garonga Airfield in Makalali Game Reserve in the same province, with the intention to return to Zandspruit Bush &amp; Aero Estate. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 91 of the Civil Aviation Regulations (CAR) 2011 as amended.</p> <p>The pilot reported that the aircraft had approximately 200 litres of fuel and an endurance of 7 hours. He stated that he took off from Zandspruit Bush &amp; Aero Estate to Garonga Airfield in Makalali Game Reserve and landed safely at 0618Z. After having had breakfast at Makalali Game Reserve, the pilot and the passenger took off from Garonga Airfield at 0817Z back to Zandspruit Bush &amp; Aero Estate.</p> <p>The pilot stated that the aircraft was stable on approach for landing on Runway 35 at Zandspruit Bush &amp; Aero Estate at a speed of 50 knots (kt). The aircraft touched down safely at between 40 kt and 45 kt. The pilot stated that when he applied the brakes, the aircraft veered off to the right of the</p>							

runway and he was unable to steer the aircraft back to the runway centreline. The aircraft ground looped and came to rest with the left wing touching the ground.

Both the pilot and the passenger disembarked from the aircraft; they were uninjured. The aircraft sustained substantial damage to the left wing, propeller and left landing gear.



**Figure 1:** The orange arrow points to the accident site. (Source: Google Earth)



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



**Figure 3:** The damaged wing, propeller and landing gear. (Source: Pilot)

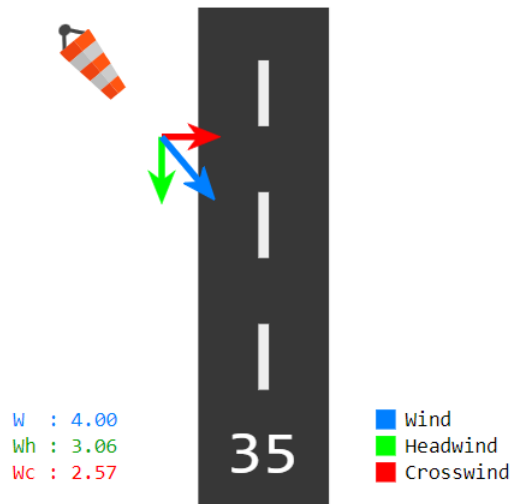


**Figure 4:** Tyre marks as the aircraft veered off to the left of the runway. (Source: Pilot)

The weather information in the table below was obtained from the South African Weather Service (SAWS) report that was issued for Hoedspruit Aerodrome (FAHS) on 23 February 2024 at 0825Z. FAHS is located 6.6 nautical miles (nm) from the accident site.

Wind Direction	310°	Wind Speed	4 knots	Visibility	9999
Temperature	29°C	Cloud Cover	FEW	Cloud Base	2500
Dew Point	20°C	QNH	1017		





**Figure 5:** The wind component at the time of the accident.  
(Source: <https://e6bx.com/wind-components/>)

## Findings

1. The pilot was initially issued an Airline Transport Pilot Licence (ATPL) by the French Authority on 1 March 2005. The licence was reissued on 11 September 2022 with an expiry date of 30 September 2024.
2. The pilot was issued a valid Class 2 aviation medical certificate on 15 April 2023 with an expiry date of 15 April 2024 with no restrictions.
3. The aircraft was issued an Airworthiness Certificate by the French Authority (equivalent to an Authority to Fly for this aircraft type in South Africa [ATF]) on 8 October 2010; it was renewed on 29 March 2022 with an expiry date of 24 November 2025. The aircraft was airworthy when it dispatched for the flight.
4. The aircraft landed for the first time in South Africa on 20 December 2013 when it was flown from France. The aircraft has been flown from South Africa to Mozambique, Botswana and Namibia.
5. The current owner of the aircraft was issued a valid Certificate of Registration (C of R) by the French Authority on 25 November 2009.
6. The aircraft was issued a Certificate of Release to Service (CRS) on 15 November 2023 with an expiry date of 14 November 2024 or at 858.38 hours, whichever occurs first. There were no reported or recorded defects before the flight.

7. The weather was not a factor to this accident.
8. There were tyre marks of the aircraft's landing gear as it veered off to the right of the runway.
9. The aircraft was written off by an insurance company after the accident, therefore, there was no technical report as the aircraft was not inspected.
10. The aircraft was likely unstable on approach; upon landing, the pilot lost directional control and the aircraft veered off to the right of the runway and ground looped.

**Probable Cause**

After landing the aircraft, the pilot lost directional control and the aircraft veered off to the right of the runway.

**Contributing Factor(s)**

Unstable approach.

**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 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 apportion blame or liability.*

**Disclaimer**

*This report is produced without prejudice to the rights of the AIID, which are reserved.*

**This report is issued by:  
Accident and Incident Investigations Division  
South African Civil Aviation Authority  
Republic of South Africa**