LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10596						
Classification	Accident	**Date**	14 August 2025		**Time**	0730Z	
Type of Operation	Private (Part 91)						
Location							
Place of Departure	Wonderboom Airport (FAWB), Gauteng Province	Place of Intended Landing	Lephalale (Ellisras) Airport (FAER), Limpopo Province				
Place of Occurrence	Lephalale (Ellisras) Airport (FAER), Limpopo Province						
GPS Co-ordinates	Latitude	23°43'36"S	Longitude	27°41'18"E	Elevation	2799 ft	
Aircraft Information							
Registration	ZS-MPR						
Make; Model; S/N	Cessna 402C (Serial Number 402C-1017)						
Damage to Aircraft	Substantial	Total Aircraft Hours	3519.3				
Pilot-in-command							
Licence Type	Commercial Pilot Licence (CPL)	Gender	Male	Age	37		
Licence Valid	Yes	Total Hours	3678.6	Total Hours on Type	62.4		
Total Hours 30 Days	32.3	Total Flying on Type Past 90 Days	18.7				
People On-board	1+5	**Injuries**	0	**Fatalities**	0	**Other (on ground)**	0

What Happened

On 14 August 2025, a pilot and five passengers on-board a Cessna 402C aircraft with registration ZS-MPR departed from Wonderboom Airport (FAWB), Gauteng province, to Lephalale (Ellisras) Airport (FAER), Limpopo province. The private 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.

The pilot stated that upon arrival at FAER and whilst overhead the airport, he completed the unmanned joining procedures and aligned the aircraft for final approach on Runway 09. The aircraft touched down and rolled approximately 100 to 150 metres (m) during which he felt the aircraft yaw to the left of the runway centreline. He then applied the full right rudder and maintained the input for approximately 50m before the aircraft yawed farther to the left and departed the runway; it came to rest in a bushy terrain adjacent to the runway.

The pilot and the passengers were unharmed during the accident sequence. The aircraft sustained substantial damage and was recovered to an approved aircraft maintenance facility after the accident.

Figure 1: The aircraft at the accident scene.

The following weather information was obtained from the pilot via the pilot questionnaire form.

Wind Direction	90°	Wind Speed	5 kts	Visibility	10km
Temperature	14°C	Cloud Cover	none	Cloud Base	none
Dew Point	4°C				

During the interview with the investigating team, the pilot stated that he did not experience any abnormalities with the aircraft's operation during taxi, take-off, climb, cruise and descent phases that would have precluded normal operation. He indicated that the aircraft was established on final approach for Runway 09 at 120 knots indicated air speed (KIAS) and that the aircraft touched down on the centreline at 110 KIAS. He further stated that he was not familiar with FAER and had difficulty finding information about the airport whilst he was preparing for the flight.

One of the passengers on-board the aircraft was also interviewed; he had a Private Pilot Licence (PPL). The passenger stated that there were no adverse weather conditions or degraded aircraft performance that might have contributed to the cause of the accident. He reported that the aircraft landed farther to the left of the runway centreline.

Post-accident Inspection

Upon inspection of the aircraft by the investigation team, there were no signs of system failure or malfunctioning found that could have caused the aircraft to veer to the left during landing. The

investigation found multiple impact marks on the left wing of the aircraft (see Figure 2); the wing tip and outboard section of the wing were found severed from the fuselage.

Figure 2: The leading edge of the left wing with impact damage.

Aircraft Performance: Technical and Operational Data (Source Cessna 402C POH)

The Cessna 402C Pilot's Operating Handbook (POH) stated the landing speed for safe operation of the aircraft as 95 knots (kts); it further stated the wingspan as 44.12 feet (ft) which equaled to 13.45m.

A video footage from the recovery team was shared with the investigators. It revealed that the aircraft's left wing had impacted vegetation on the left edge of Runway 09 over a distance of approximately 120m to 150m. The wing tip broke off and was found on the edge of the runway near the first tree that the aircraft had impacted. The outer part of the left wing was found approximately 60m down the runway, in the direction of landing. The final impact indications where the aircraft came to rest were 50m farther from where the outer part of the left wing was found (see Figures 3, 4, 5 and 6).

Figure 3: The left-wing tip on the edge of Runway 09. (Source: Video footage still image)

Figure 4: The left outer wing section found on Runway 09. (Source: Video footage still image)

Figure 5: One of the severed trees impacted by the aircraft's left wing. (Source: Video footage still image)

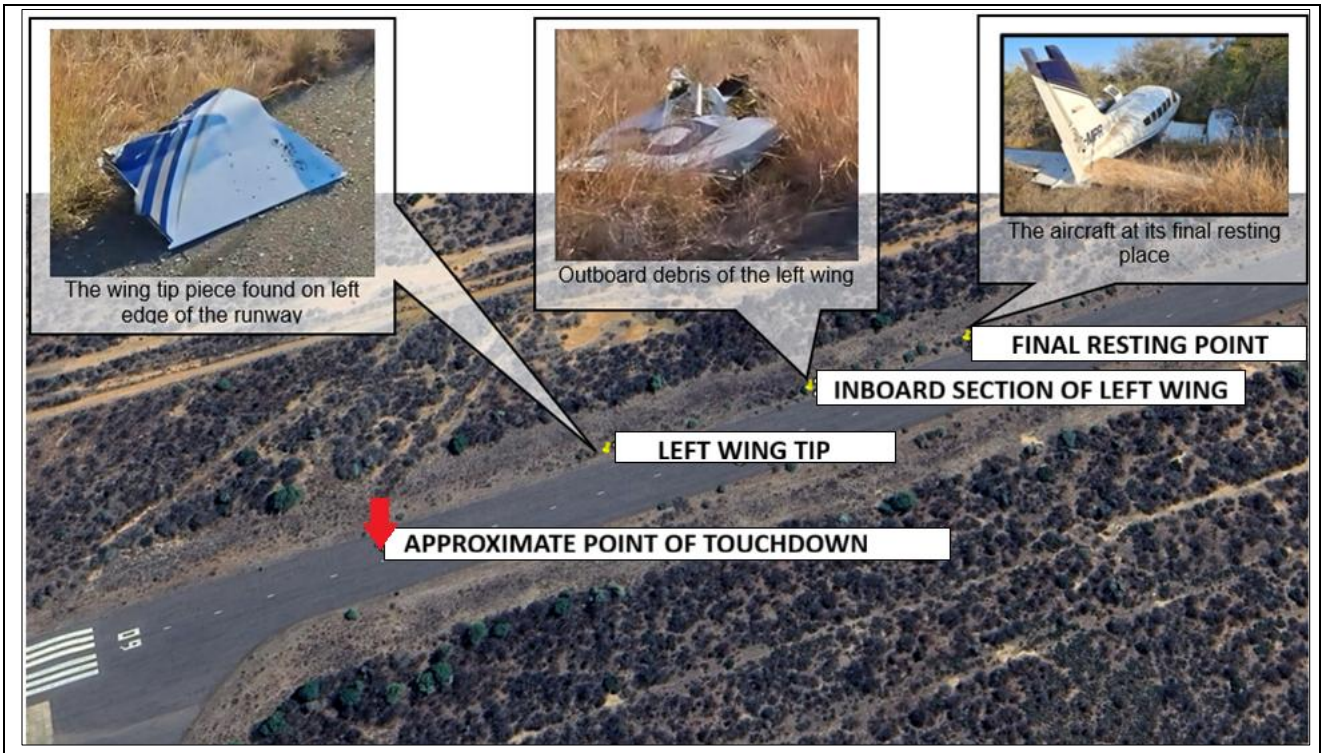

Figure 6: Approximate location of debris.

FAER

FAER is an old airport operated by the South African National Defence Force (SANDF) and is not subject to the requirements of the South African Civil Aviation Authority Regulations Part 139 Aerodromes and Heliports. The runway is 30m wide and 2194m long. Assessment of the runway condition revealed a substantial amount of vegetation alongside the left and right edges. This was also evident in the video footage that was supplied by the recovery team (see Figure 3, 4, 5, 6 and 7).

Figure 7: Partial aerial view of FAER showing vegetation near the left and right edges of Runway 09.

Runway Safety Areas (Source: Federal Aviation Administration [FAA] website)

Runway safety areas (RSAs) preserve the same characteristics that pioneer aviators sought in the days before paved runways: smooth and clear grading, good drainage, load bearing capability and the absence of non-essential and non-frangible objects.

Findings

1. Personnel Information

1.1. The pilot had a Commercial Pilot Licence (CPL) that was initially issued by the Regulator (SACAA) on 14 February 2017. The licence was reissued on 30 January 2025 with an expiry date of 31 October 2025. The aircraft type was endorsed on his licence. The pilot had accumulated 3678.6 total flying hours of which 62.4 hours were on the aircraft type. The pilot had last flown the aircraft type on 10 August 2025 for 2.4 hours.

1.2. The pilot had a Class 1 aviation medical certificate that was issued on 27 February 2025 with an expiry date of 28 February 2026. The pilot had no restrictions listed on his medical certificate.

2. Aircraft:

2.1. The aircraft had a valid Certificate of Airworthiness (C of A) that was issued by the Regulator with an expiry of 15 July 2026. The aircraft's Certificate of Registration (C of R) was issued to the present owner on 12 December 2024.

2.2. The latest mandatory periodic inspection of the aircraft was conducted and certified on 9 June 2025 at 3508.8 airframe hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 8 June 2026 or at 3608.8 airframe hours, whichever comes first. The aircraft had a total of 3518.3 airframe hours at the time of the accident.

2.3. The investigation team found no evidence of system failure or malfunction that could have caused the aircraft to veer to the left.

3. Environment

3.1. Good weather conditions prevailed at the time of the flight; the weather did not contribute to this accident.

4. Sequence of Events

4.1. The pilot approached the runway for landing at a higher-than-normal speed, which likely increased the workload in the cockpit and reduced his ability to maintain proper alignment with the runway centreline.

4.2. The aircraft touched down on the left of the runway centreline at approximately 110 kts, exceeding the recommended landing speed of 95 kts. The high speed reduced the aircraft's stability during the landing roll; this prevented the pilot from making significant corrective inputs to steer the aircraft to the centre of the runway.

4.3. Shortly after touchdown, the left wing struck vegetation on the left edge of the runway, severing the wing tip and causing the aircraft to veer farther to the left. The aircraft's left wing continued to impact vegetation during the landing roll, which led to the outboard section of the wing being severed; this kept the aircraft veering further to the left, thus, negating corrective rudder and brake inputs by the pilot. The aircraft came to rest in the vegetation on the left of Runway 09.

Probable Cause(s)

Unstable approach which resulted in the aircraft touching down to the left of the runway centreline and impacting vegetation along the edge of the runway; the pilot subsequently lost directional control of the aircraft which came to a stop in the vegetation.

Contributing Factor(s)

Lack of a runway safety area on the edges of the runway.

Safety Action(s)

None.

Safety Message

Pilots should avoid landing aircraft when their approach is unstable; they should rather execute a go-around when landing parameters deviate from the norm.

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 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.

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
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