LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10604						
Classification	Accident	**Date**	11 September 2025	**Time**	0704Z		
Type of Operation	Agriculture (Part 137)						
Location							
Place of Departure	Eenboom Farm Airstrip, Swartland, Western Cape Province	Place of Intended Landing	Eenboom Farm Airstrip, Swartland, Western Cape Province				
Place of Occurrence	Eenboom Farm Airstrip, Swartland, Western Cape Province						
GPS Co-ordinates	Latitude	33°09′36.4″ S	Longitude	18°35′28.6″ E	Elevation	2 473.8 ft	
Aircraft Information							
Registration	ZS-OGP						
Make; Model; S/N	Air Tractor; AT-402A (Serial Number: 402A-1057)						
Damage to Aircraft	Substantial	Total Aircraft Hours	13 006,5				
Pilot-in-command							
Licence Type	Commercial Pilot Licence (CPL)	Gender	Male	Age	42		
Licence Valid	Yes	Total Hours	1 838	Total Hours on Type	113.5		
Total Hours 30 Days	44.60	Total Flying on Type Past 90 Days	113.5				
People On-board	1 + 0	**Injuries**	0	**Fatalities**	0	**Other (on ground)**	0

What Happened

On Thursday, 11 September 2025, a pilot on-board an Air Tractor AT-402A aircraft with registration ZS-OGP took off on a crop-spraying flight (aerial application) from Eenboom Farm Airstrip in Western Cape province with the intention to land back at the same airstrip. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 137 of the Civil Aviation Regulations (CAR) 2011, as amended.

The pilot stated earlier the same morning that he conducted the first spray run; the aircraft had 1 000 litres (L) of pesticide in the hopper tank. He further stated that after the first spray run, he returned to the gravel-covered airstrip with the intention to reload the pesticide for the second application. Upon his return, he completed all standard approach and landing checks with full flaps selected (40 degrees) prior to touchdown on Runway 14.

The aircraft touched down with the main wheels first, followed by the tailwheel. During the landing roll, the pilot had difficulty maintaining directional control despite applying the right rudder and brake input. The aircraft veered off to the left side of the runway before it stopped.

According to the pilot, the aircraft came to a stop after rolling approximately 240 metres (m) on the airstrip. The aircraft sustained substantial damage to the empennage and right main landing gear. No person was injured during the accident sequence.

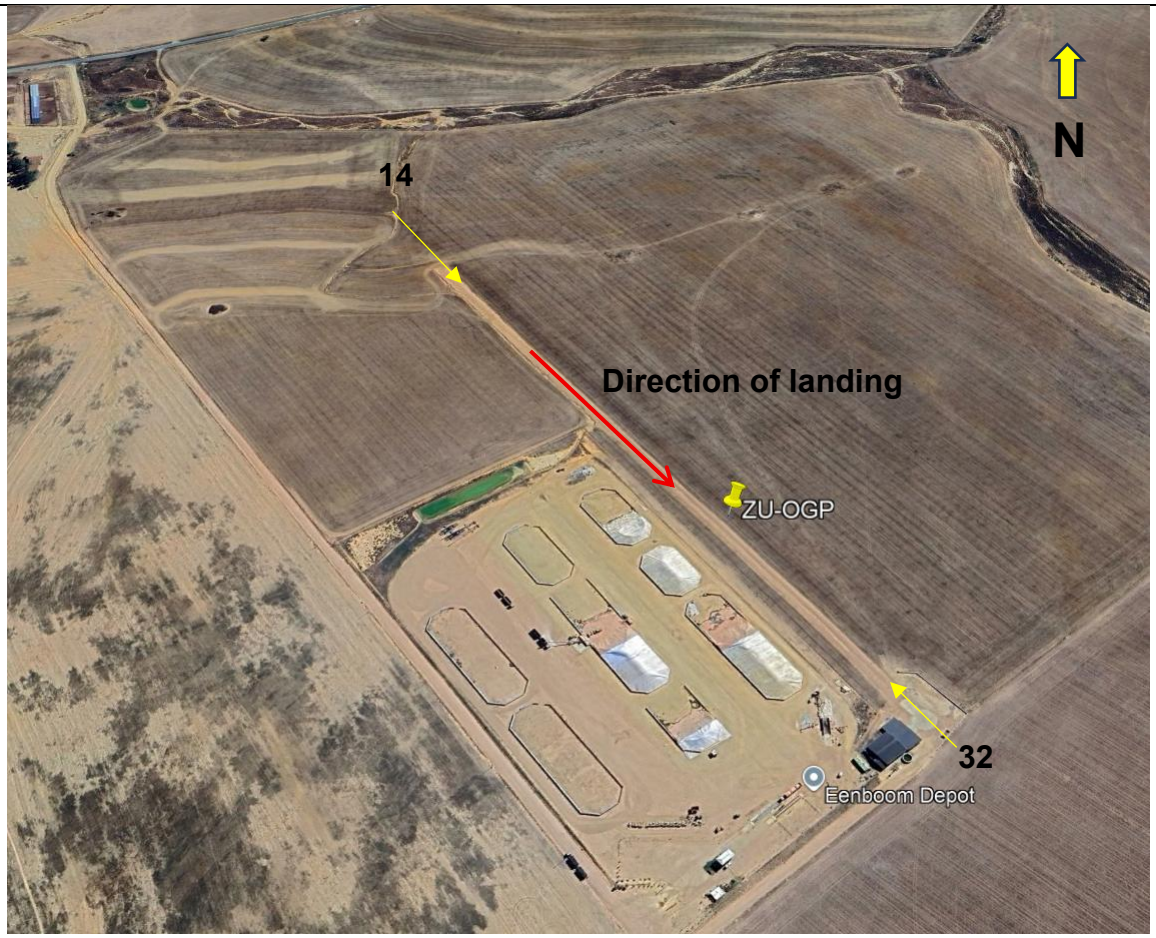

Figure 1: An aerial view of the airstrip, the direction of landing (red arrow) and the approximate area where the aircraft came to a stop. Runway 14 was in use at the time of the accident. (Source: Google Earth)

Figure 2: The damaged empennage (red arrows on the left side) and tailwheel. (Source: Pilot)

Figure 3: Damage on the right side of the empennage. (Source: Pilot)

Figure 4: The bent right main gear. (Source: Pilot)

Post-accident Examination

Post-accident, the aircraft flight controls, including the brakes, were examined and nothing abnormal was detected. Good weather conditions prevailed at the time of the flight. Damage observed on the empennage, tailwheel and the right main gear was consistent with overcontrolling of the aircraft.

The following weather information was provided by the pilot through the pilot questionnaire.

Wind Direction	090°	Wind Speed	4 knots	Visibility	Good
Temperature	15°C	Cloud Cover	Scattered	Cloud Base	+500ft
Dew Point	unknown	QNH	unknown		

Landing Roll Process (Source: FAA-H-8083-3C)

The landing process should never be considered complete until the airplane decelerates to the normal taxi speed during the landing roll or has been brought to a complete stop when clear of the landing area. The pilot should be alert for directional control difficulties immediately upon and after touchdown, and the elevator control should be held back as far as possible and as firmly as possible until the airplane stops. This provides more positive control with tailwheel steering, tends to shorten the after-landing roll, and prevents bouncing and skipping.

Any difference between the direction the airplane is travelling and the direction it is headed (drift or crab) produces a moment about the pivot point of the wheels, and the airplane tends to swerve. Loss of directional control may lead to an aggravated, uncontrolled, tight turn on the ground, or a ground loop. The combination of inertia acting on the centre-of-gravity (CG) and ground friction of the main wheels during the ground loop may cause the airplane to tip enough for the outside wing tip to contact the ground and may even impose a sideward force that could collapse one landing gear leg (Figure 5) In general, this combination of events is eliminated by landing straight and avoiding turns at higher than normal running speed.

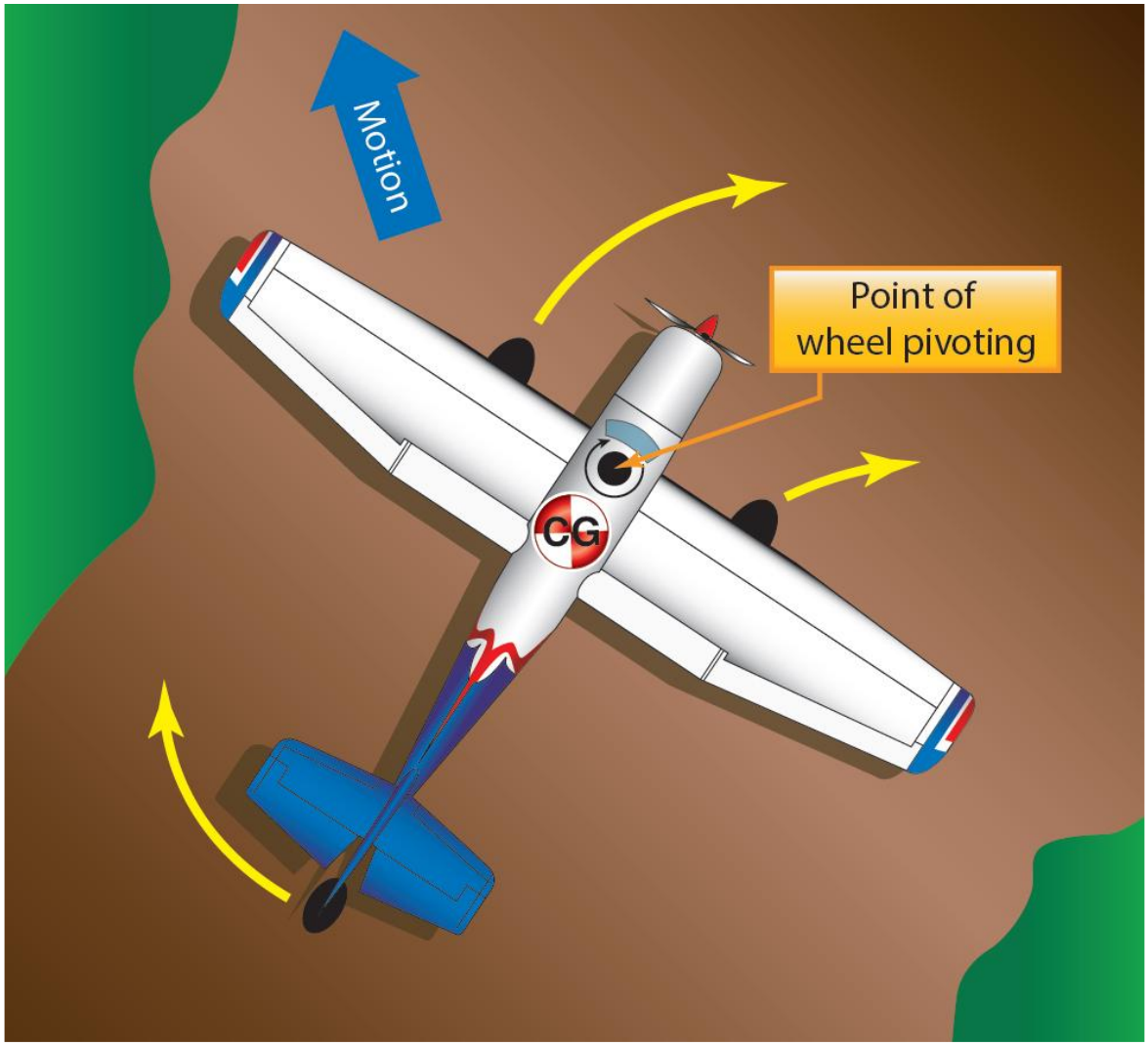

Figure 5: Effect of center-of-gravity (CG) on directional control.

To use the brakes, the pilot should slide the toes or feet up from the rudder pedals to the brake pedals (or apply heel pressure in airplanes equipped with heel brakes). If rudder pressure is being held at the time braking action is needed, that pressure should not be released as the feet or toes are being slid up to the brake pedals because control may be lost before brakes can be applied. During the ground roll, the airplane's direction of movement may be changed by carefully applying pressure on one brake or uneven pressures on each brake in the desired direction. Caution should be exercised when applying brakes to avoid overcontrolling.

If a wing starts to rise, aileron control should be applied toward that wing to lower it. The amount required depends on speed because as the forward speed of the airplane decreases, the ailerons become less effective.

If available runway permits, the speed of the airplane should be allowed to dissipate in a normal manner by the friction and drag of the wheels on the ground. Brakes may be used if needed to help slow the airplane. After the airplane has been slowed sufficiently and has been turned onto a taxiway or clear of the landing area, it should be brought to a complete stop. Only after this is done should the pilot retract the flaps and perform other checklist items.

Findings

1. Pilot Information

1.1 The pilot had a Commercial Pilot Licence (CPL) that was initially issued by the Regulator (SACAA) on 13 May 2021. The licence was renewed on 7 May 2025 with an expiry date of 31 May 2026.

1.2 The pilot had a Class 1 aviation medical certificate that was issued on 6 May 2025 with an expiry date of 6 May 2026 and with no restrictions.

2. Aircraft

2.1 The last maintenance inspection of the aircraft was conducted and certified on 11 July 2025 at 2917.0 airframe hours. The aircraft had accrued 75.6 hours since the last maintenance inspection.

2.2 A Certificate of Registration (C of R) was issued to the present owner on 14 November 2024.

2.3 The aircraft had a valid Certificate of Airworthiness (C of A) that was initially issued by the Regulator on 20 July 1998. The C of A had an expiry date of 31 July 2026. The aircraft was airworthy when it was dispatched for the flight.

2.4 The aircraft maintenance organisation (AMO) had issued the aircraft Certificate of Release to Service (CRS) on 11 July 2025 with an expiry date of 10 July 2026 or at 3 017 airframe hours, whichever comes first.

3. Meteorological Information

3.1 Good weather prevailed at the time of the flight; the weather could not be attributed to the cause of the accident.

Probable Cause(s)

Loss of directional control after the landing roll which resulted in the aircraft veering off the runway.

Contributing Factor(s)

Overcontrolling the aircraft after landing.

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 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
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This report is issued by:

Accident and Incident Investigations Division
South African Civil Aviation Authority
Republic of South Africa