

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10256						
Classification	Accident	Date	28 January 2023		Time	1150Z	
Type of Operation	Private (Part 91)						
Location							
Place of Departure	Private Farm in Malelane, Mpumalanga Province		Place of Intended Landing	Wonderboom Aerodrome (FAWB), Gauteng Province			
Place of Occurrence	Wonderboom Aerodrome (FAWB) on Runway 29						
GPS Co-ordinates	Latitude	25°39'13.58" S	Longitude	028°13'42" E	Elevation	5 473 ft	
Aircraft Information							
Registration	ZS-LAP						
Make; Model; S/N	Cessna 210 (Serial Number: 210-64078)						
Damage to Aircraft	Substantial			Total Aircraft Hours	8339.2		
Pilot-in-command							
Licence Type	Private Pilot Licence (PPL)		Gender	Male		Age	61
Licence Valid	Yes	Total Hours	246.63		Total Hours on Type	9.1	
Total Hours Past 30 Days	9.1		Total Flying Hours on Type Past 90 Days	9.1			
People On-board	1 + 0	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened							
<p>On Saturday, 28 January 2023 at 1215Z, a pilot on-board a Cessna 210 with registration ZS-LAP took off from a private farm in Malelane, Mpumalanga province, to Wonderboom Aerodrome (FAWB) in Gauteng province. This was a private flight which was conducted in visual meteorological conditions (VMC) by day and under the provisions of Part 91 of the Civil Aviation Regulations (CAR) 2011 as amended.</p> <p>Upon entering the FAWB airspace, the pilot performed the pre-landing checks which included lowering the undercarriage. Whilst on approach for landing, the FAWB air traffic control (ATC) requested the pilot to orbit as there was another aircraft which was landing ahead of the ZS-LAP. During orbit, the pilot retracted the landing gears. Upon returning for landing approach on Runway 29, the pilot forgot to extend the landing gears again and, as a result, the aircraft landed on its belly. The pilot reported that by the time he heard a landing warning horn it was too late to either go-around or lower the landing gear. The aircraft scraped along the runway until it came to a halt. The Airport Rescue and Firefighting (ARFF) team rushed to the accident site upon noticing the accident. They discharged the fire extinguishing chemical (foam) to prevent a possible fire eruption.</p> <p>The pilot disembarked from the aircraft unassisted; he was uninjured. The aircraft damage was limited to the bottom fuselage. No further damage was reported. The accident occurred during daylight at Global Positioning System (GPS) co-ordinates determined to be 25°39'13.58" S 028°13'42" E, at an elevation of 5 473ft.</p>							



Figure 1: The FAWB runway layout. (Source: Google Earth)



Figure 2: The chemical foam sprayed on the aircraft and the runway to prevent a possibility of fire eruption. (Source: Pilot)

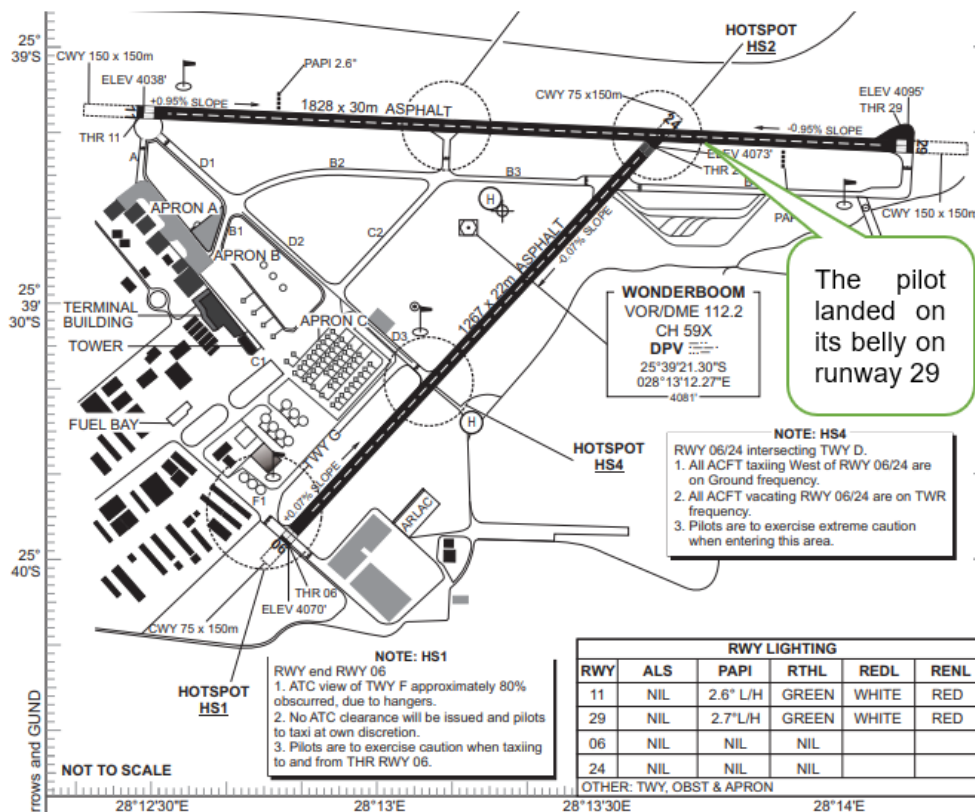


Figure 3: FAWB airport layout for FAWB.

The following information is an extract from the Cessna 210 Pilot's Operating Handbook (POH)

Before landing

Seats, Belts, Shoulder Harnesses – Secure

Fuel Selector Valve—Fuller Tank

Landing gear—Extend (below 140 KIAS)

Landing gear—check (observe main gear down and green indicator light on)

Mixture—Rich

Propeller—High RPM

Wing Flaps—As DESIRED (0° to 10° below 140 KIAS, 10° to 30° below 105 KIAS)

Autopilot (If installed)—OFF.

Elevator Trim—Adjust

Normal landing

Airspeed –80-90 KIAS (flaps up)

Wing Flaps—As DESIRED (flaps down preferred)

Airspeed—70-80 KIAS (flaps DOWN)

Elevator Trim—ADJUST

Touchdown—MAIN WHEEL FIRST

Landing Roll—LOWER NOSE WHEEL GENTLY

Braking—MINIMUM REQUIRED

Findings
<ul style="list-style-type: none"> • The pilot was reissued the Private Pilot Licence (PPL) by the South African Civil Aviation Authority (SACAA) on 31 August 2022 with an expiry date of 31 August 2024. • The pilot had a valid Class 2 aviation medical certificate which was issued on 3 August 2022 with an expiry date of 3 August 2023. • This flight was conducted under the provisions of Part 91 of the CAR 2011 as amended. • At the time of the accident, the pilot had flown a total of 246.63 hours, of which 9.1 hours were on the aircraft type. • The last 100-hour MPI prior to the accident flight was certified on 8 February 2022 at 8302.2 airframe hours. The aircraft was flown a further 37 hours since the last MPI. • The aircraft maintenance organisation (AMO) that performed the last inspection had a valid approval certificate that was issued by the SACAA IAW Part 145 of the CAR 2011 as amended on 29 November 2022 with an expiry date of 30 November 2023. • The Certificate of Airworthiness (C of A) was issued on 7 August 2013 with an expiry date of 31 August 2023. • The Certificate of Registration (C of R) was issued to the current owner on 11 June 2019. • The Certificate of Release to Service (CRS) was issued on 8 February 2022 with an expiry date of 7 February 2023 or at 8402.2 hours, whichever occurs first. • The pilot reported that he forgot to lower the undercarriage after the ATC instructed him to orbit, causing him to not follow the landing procedures as outlined in the POH.
Probable Cause
The pilot forgot to lower the landing gears, therefore, the aircraft landed on its belly.
Contributing Factor
None.
Safety Action(s)
None.
Safety Message and/or Safety Recommendation/s
None.
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 possible 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

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