

LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

Reference Number	CA18/2/3/10358						
Classification	Accident	Date	13 August 2023	Time	1325Z		
Type of Operation	Private Flight (Part 91)						
Location							
Place of Departure	Prince Albert Airport (FAPC), Western Cape Province		Place of Intended Landing	Prince Albert Airport (FAPC), Western Cape Province			
Place of Occurrence	Prince Albert Airport (FAPC) Runway 19						
GPS Co-ordinates	Latitude	33°11'20" S	Longitude	022°01'06.74" E	Elevation	1801 feet (ft)	
Aircraft Information							
Registration	ZS-TKP						
Make; Model; S/N	Cessna 177 RG (Serial Number: 177RG-0797)						
Damage to Aircraft	Substantial		Total Aircraft Hours	4379.3			
Pilot-in-command							
Licence Type	Airline Transport Pilot Licence		Gender	Male		Age	45
Licence Valid	Yes	Total Hours	6722		Total Hours on Type	17.1	
Total Hours past 30 Days	0.8		Total Flying Hours on Type Past 90 Days	3.9			
People On-board	1 + 1	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened							
<p>On 13 August 2023, a pilot on-board a Cessna 177 RG aircraft with registration ZS-TPK took off on a private flight from Prince Albert Airport (FAPC) in the Western Cape province with the intention to land at the same airport. Visual meteorological conditions (VMC) by day prevailed at the time of the flight which was conducted under the provisions of Part 91 of the Civil Aviation Regulations (CAR) 2011 as amended.</p> <p>According to the pilot, he was on a sightseeing flight. On his return, he joined the circuit without any anomalies. He stated that on final approach the flaps were set on 30° when he landed the aircraft. As the aircraft touched down, he realised that the landing gears were not extended. The aircraft maintained the centreline but the nose turned towards the left before it came to a stop. The pilot mentioned that he made an omission in reading and carrying out the landing items on the checklist (Pilot's Operating Handbook). The pilot stated that he did not hear the warning horn in the cockpit. The passenger who has no flying experience did not remember hearing anything resembling a sounding of a horn. The aircraft sustained substantial damage to the underbelly and the propeller blades, and no injuries were reported.</p>							

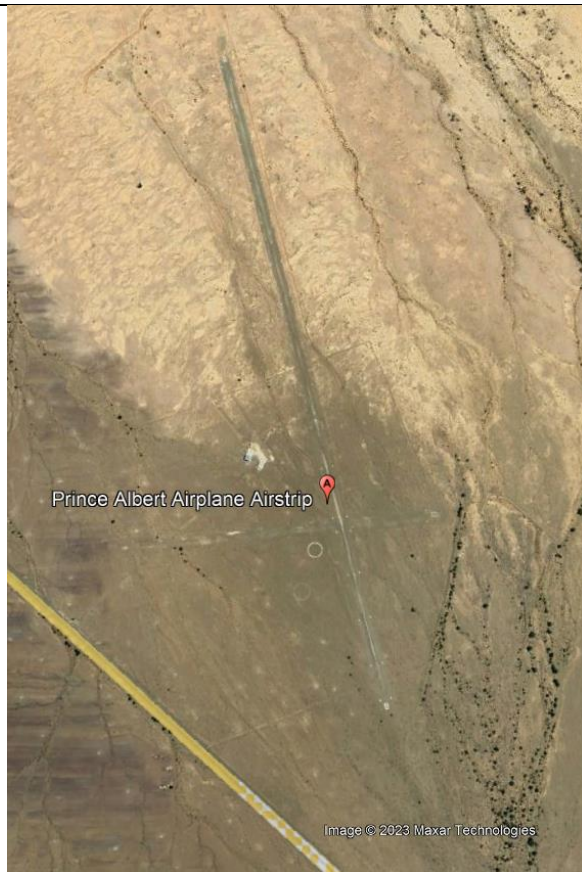


Figure 1: The airport where the accident occurred. (Source: Google Earth)



Figure 2: The final resting position of the aircraft. (Source: Pilot)

- The weather report was obtained from the pilot questionnaire. The weather information entered in the table below was captured on 13 August 2023.

Wind Direction	190°	Wind Speed	3 knots	Visibility	9999
Temperature	22°C	Cloud Cover	CAVOK	Cloud Base	-
Dew Point	-	QNH	-		

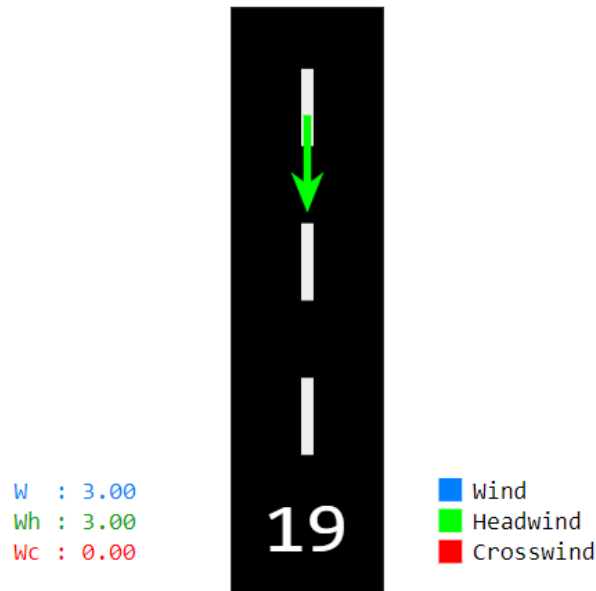


Figure 3: Wind component. (Source: <https://e6bx.com/wind-components>)

- The checklist of the C 177 RG requires that one lowers the landing gear on final approach checks.

FINAL	
1. Flaps.....	30°<95 KIAS
2. Mixture/Propeller	FULL FORWARD
3. Gear	DOWN (< 85 KIAS) GREEN
4. Landing/Taxi Lights.....	ON
5. Approach Speed	70-80 KIAS

Figure 4: A snippet of the final landing checks. (Source: salt.aero/wp)

Findings

- The pilot was issued a Private Pilot Licence (PPL) on 3 March 2010. He obtained his Commercial Pilot Licence (CPL) on 10 June 2023 with an expiry date of 30 June 2024.

2. The pilot was issued a valid Class 2 aviation medical certificate on 27 September 2022 with an expiry date of 30 September 2023.
3. The aircraft was issued a Certificate of Airworthiness (C of A) on 18 May 2022 with an expiry date of 31 May 2024. The aircraft was airworthy when it departed for the flight.
4. The aircraft was issued a valid Certificate of Registration (C of R) on 3 November 2021.
5. The last maintenance inspection that was conducted on the aircraft prior to the accident flight was on 10 May 2023 at 4375.4 airframe hours. The aircraft was issued a Certificate of Release to Service (CRS) on 12 June 2023 with an expiry date of 11 June 2024 or at 4475.4 airframe hours, whichever occurs first. There were no reported or recorded defects prior to the flight.
6. The aircraft maintenance organisation (AMO) that conducted maintenance on the aircraft had a valid AMO Certificate that was issued by the Regulator (SACAA) on 1 September 2022 with an expiry date of 30 September 2023.
7. The AMO conducted a system check on the landing gear warning horn and found the system serviceable.
8. The investigation established that the pilot forgot to lower the landing gears due to not reading or completing the landing checklist items prescribed in the Pilot's Operating Handbook.

Probable Cause

The pilot forgot to lower the landing gears due to not reading or completing the landing checklist items prescribed in the Pilot's Operating Handbook.

Contributing Factor(s)

None.

Safety Action(s)

None.

Safety Message

To avoid injury and damage to property, pilots are advised to be vigilant in all phases of flights such as take-offs and landings.

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 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**