



LIMITED ACCIDENT INVESTIGATION REPORT
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Reference Number		CA18/3/2/10123					
Classification	Accident	Date	24 February 2022	Time	0940Z		
Type of Operation	Training (Part 141)						
Location							
Place of Departure	Grand Central Aerodrome (FAGC)		Place of Intended Landing	Grand Central Aerodrome (FAGC)			
Place of Accident	Runway 35, FAGC						
GPS Co-ordinates	Latitude	S25°59'33.98"	Longitude	E028°08'37.68"	Elevation	5326 feet	
Aircraft Information							
Registration	ZS-OBA (Serial Number 30-1601)						
Model/Make	PA30, Piper Aircraft Corporation						
Damage to Aircraft	Substantial		Total Aircraft Hours	7459.5			
Pilot-in-command							
Licence Type	Commercial Pilot Licence (CPL) Aeroplane		Gender	Male	Age	42	
Licence Valid							
Total Hours on Type	70.1		Total Flying Hours	1429.0			
People On-board	1+1	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened							

On 24 February 2022 at 0840Z, an instructor and a student pilot on-board a Piper PA30 aircraft with registration marks ZS-OBA were preparing to conduct circuit training exercises at a circuit altitude of 6800 feet (ft) at Grand Central Aerodrome (FAGC), Gauteng province. The flight was conducted in visual meteorological conditions (VMC) by day and under the provisions of Part 141 of the Civil Aviation Regulations (CAR) 2011 as amended.

This was the student pilot's second training flight converting from a single to a twin-engine aircraft to a Commercial Pilot Licence (CPL). The duo completed the pre-flight checks and, thereafter, got airborne at 0900Z from Runway (RWY) 35. The instructor stated that they completed two circuits at an altitude of 6800 feet and downwind checks.

During the third circuit, there were two other single-engine aircraft ahead of the ZS-OBA in the circuit; the instructor advised the student pilot to slowdown and commence the downwind checks. Whilst in the process of doing the downwind checks, the pair lost sight of the two aircraft that were ahead of them. Meanwhile, the tower control informed instructor and the student pilot that the last (of the two) aircraft was on final approach. The instructor and the student pilot had stretched their

downwind leg and were now commencing with their descent; the aircraft reached the short final approach a little higher than normal and approximately 15 miles per hour (mph) faster than the normal approach speed of 90mph (78 kts). Whilst on short finals, the instructor reminded the student pilot to complete CPUFF checks which, at the time, were not completed yet (see CPUFF explanation below). As the instructor and the student pilot were busy chasing the glide slope, they did not remember to lower the undercarriage. (Note: *The warning horn for 'undercarriage not down' activates when the aircraft has full flaps, and the manifold pressure is below 12 inches before landing.*) Both the instructor and the student pilot confirmed that the only time they realised that the undercarriage was still retracted was during flare when the aircraft kept sinking until it landed on its belly. The aircraft sustained damages to both propellers as well as the lower airframe. Neither the instructor nor the student pilot was injured during the accident.



Figure 1: The aircraft as it came to rest on RWY 35. (Source: Pilot)

The instructor confirmed that he was distracted by the two aircraft earlier in the circuit, as well as correcting the student pilot's unstable approach. The aircraft was tested, and both the undercarriage and the warning horn were operational.

CPUFF Check is defined as follows:

- C- Carburetor heat off
- P- Pitch fine
- U- Undercarriage down and locked
- F- Fuel pump on
- F- Fuel selector on mains

What was found:

- This was the student pilot's second flight towards her rating on twin-engine aircraft.
- The instructor had accumulated 70.1 hours on the aircraft type and had 1429.1 total flying hours.
- The instructor's Class 1 medical certificate was issued on 5 May 2021 with an expiry date of

31 May 2022 with no restrictions.

- The student pilot's Class 1 medical certificate was issued on 19 April 2021 with an expiry date of 30 April 2022 with no restrictions.
- The last annual inspection carried out on the aircraft prior to the accident flight was on 23 October 2021. The aircraft was released at 1548 Tacho hours and had accumulated a total of 47.7 hours since the last inspection.
- The aviation training organisation (ATO) had a valid certificate, issued on 18 January 2022 with an expiry date of 31 January 2023. The ATO is approved to train pilots on multi engine aircraft (MEA).

Probable cause:

The aircraft landed on its belly due to the crew not lowering the landing gears.

Contributing factor:

1. The instructor was distracted by the instability of the aircraft on approach.
2. The CPUFF checks were not completed on time before landing.

Safety Action/s

None.

Safety Message

Pilots are urged to always conform to the tasks at hand especially during the critical take-off and landing phases of flight which could cause injury or damage to property if not executed correctly.

Purpose of the Investigation

*In terms of Regulation 12.03.1 of the Civil Aviation Regulations (CAR) 2011, 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.***

About this Report

Decisions regarding whether to investigate, and the scope of an investigation are based on many factors, including the level of safety benefit likely to be obtained from an investigation. For this occurrence, no 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 brief report. The report has been compiled using information supplied in the initial notification, as well as follow-up information 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 accident.

This report provides an opportunity to share safety message/s in the absence of an investigation.

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.

Disclaimer

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This report is issued by:

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