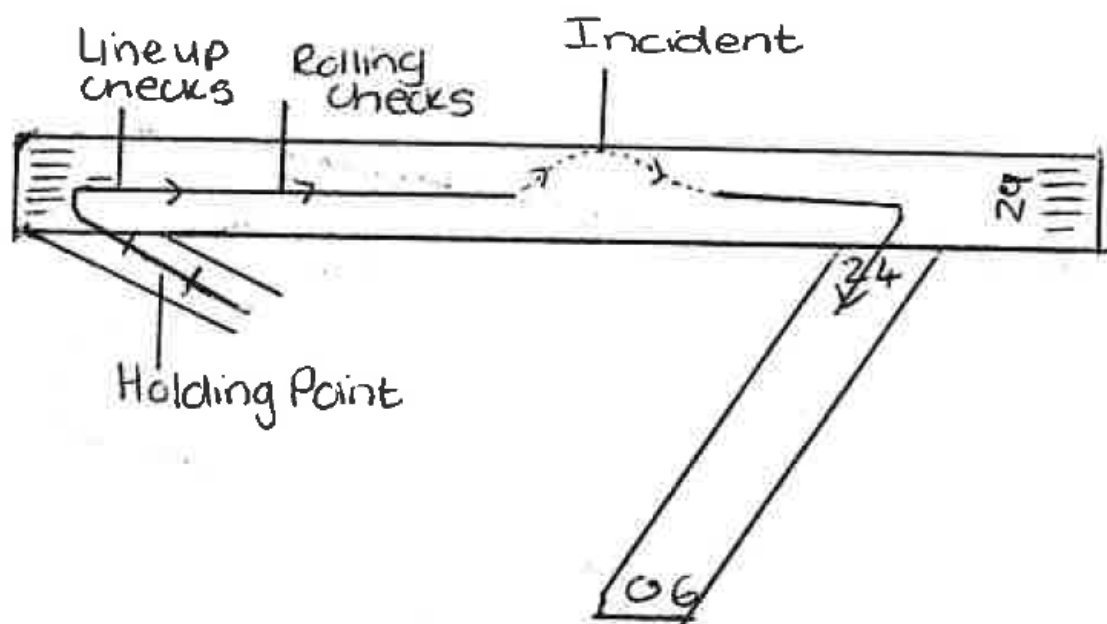




LIMITED SERIOUS INCIDENT INVESTIGATION REPORT
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Reference Number		CA18/3/2/1358					
Classification	Serious Incident	Date	30 July 2021	Time	1330Z		
Type of Operation	Training (Part 141)						
Location							
Place of Departure	Wonderboom Aerodrome (FAWB)		Place of Intended Landing	Wonderboom Aerodrome (FAWB)			
Place of Incident	Runway 11 at Wonderboom Aerodrome (FAWB)						
GPS Co-ordinates	Latitude	25°39'19.11" S	Longitude	028°13'16.81" E	Elevation	4 095 ft	
Aircraft Information							
Registration	ZS-GDA						
Make/Model	Cessna 172P (Serial No. 172-75033)						
Damage to Aircraft	No damage		Total Aircraft Hours	18 370.7			
Pilot-in-command							
Licence Valid	Yes		Gender	Female	Age	25	
Licence Type	Commercial Pilot Licence						
Total Hours on Type	70.9		Total Flying Hours	419.6			
People On-board	2 + 0	Injuries	0	Fatalities	0	Other (On Ground)	0
What Happened							
<p>On Friday afternoon, 30 July 2021, a flight instructor and a student pilot on-board a Cessna 172P aircraft with registration ZS-GDA were intending to engage in a circuit training flight at Wonderboom Aerodrome (FAWB). They were instructed by air traffic control (ATC) to hold at the holding point of Runway 11 for approximately 5 to 10 minutes due to airspace congestion.</p> <p>Thereafter, ATC asked the student pilot and the flight instructor if they were ready for an immediate take-off, to which the flight instructor replied affirmative; they were then cleared for take-off on Runway 11. The flight instructor told the student pilot that she would take control of the aircraft; the flight instructor then initiated the take-off roll. Once the aircraft was stabilised on the runway, the flight instructor handed control over to the student pilot. At that stage, they commenced with the rolling checks and it was noted that the airspeed indicator was not responding.</p> <p>The flight instructor decided that they should abort take-off; and again, the flight instructor took over control of the aircraft and, whilst reaching for the throttle, her seat (right front) unlatched and</p>							

rolled backwards, making it impossible for her to reach any of the controls. The aircraft then yawed to the left; at that stage, the student pilot took over control of the aircraft again and steered it back to the runway centreline while the flight instructor moved her seat forward and re-latched it. Once in position, the flight instructor took control of the aircraft once more and vacated the active runway via Runway 24. She taxied the aircraft back to the Aviation Training Organisation (ATO) flight line. Neither of the two crew members were injured during the serious incident, and the aircraft did not sustain damage. *The flight instructor provided the sketch below to illustrate the sequence of events.*



The last maintenance inspection that was carried out on the aircraft prior to the serious incident was certified on 9 July 2021 at 18 319.8 airframe hours. Post-inspection, the aircraft was flown for a further 50.9 hours.

Following the serious incident, the flight instructor entered the following defect in the aircraft's flight folio; *"Seat moved back during take-off"*. The aircraft was taken to the aircraft maintenance organisation (AMO) following the serious incident, however, the AMO could not find any fault with the seat's latching mechanism nor the airspeed indicator. The aircraft was returned to service.

A placard was placed on the aircraft's instrument panel (see Figure 1) which read: *"Ensure that seat is locked in position prior to taxi, take-off and landing. Failure to properly latch seat and failure to comply with all safety instructions can result in bodily injury or death"*.

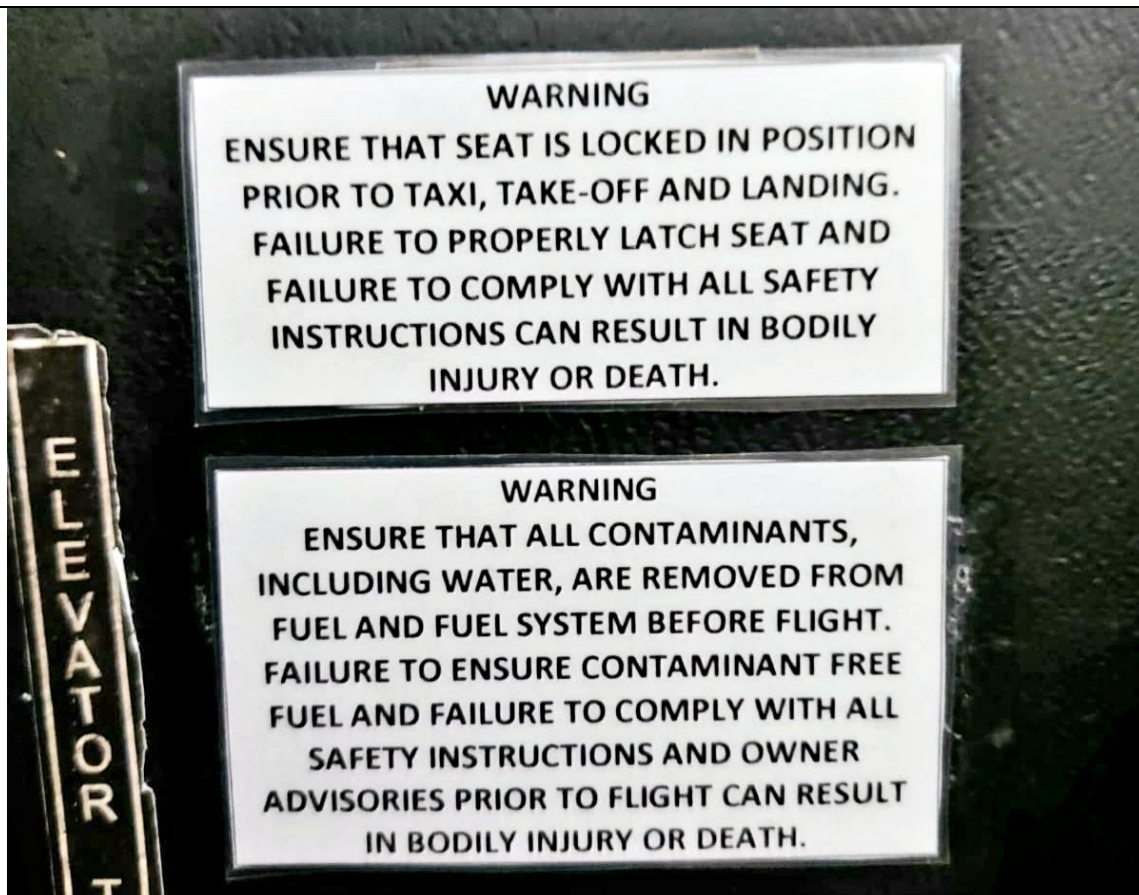


Figure 1: Placard in the cockpit of ZS-GDA. (Source: ATO)

Probable cause:

Following a decision to abort take-off, the flight instructor's seat unlatched and moved backwards, rendering her unable to reach the controls, whereupon the aircraft veered off to the left of the runway. Thereafter, the student pilot took control of the aircraft and steered it back onto the runway centreline.



Figure 2: The file picture of the Cessna 172P, ZS-GDA.

Safety Action/s

None.

Safety Message

It is important to ensure that the seat latching mechanism and floor rails are always in a good working condition. Seats (pilot flying) becoming unlatched in aircraft have led to several accidents throughout the years.

Purpose of the Investigation

*In terms of Part 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

This report is produced without prejudice to the rights of AIID, which are reserved.

**This report is issued by:
Accident and Incident Investigations Division
South African Civil Aviation Authority
Republic of South Africa**