

LIMITED OCCURRENCE INVESTIGATION REPORT

Reference Number	CA18/2/3/10511						
Classification	Accident		Date	5 October 2024		Time	0850Z
Type of Operation	Training (Part 141)						
Location							
Place of Departure	Ermelo Aerodrome (FAEO), Mpumalanga Province		Place of Intended Landing	Ermelo Aerodrome (FAEO), Mpumalanga Province			
Place of Occurrence	Ermelo Aerodrome Runway 13						
GPS Co-ordinates	Latitude	26°29'39.28" S	Longitude	29°58'36.51" E	Elevation	5 651ft	
Aircraft Information							
Registration	ZU-JBA						
Make; Model; S/N	Jabiru; J400 (Serial Number: 51)						
Damage to Aircraft	Substantial			Total Aircraft Hours	1190.7		
Pilot-in-command							
Licence Type	Commercial Pilot Licence (CPL)		Gender	Male	Age	24	
Licence Valid	Yes	Total Hours	253.6	Total Hours on Type	50.9		
Total Hours Past 30 Days	20.6		Total Flying Hours on Type Past 90 Days			30.1	
People On-board	2 + 0	Injuries	0	Fatalities	0	Other (on ground)	0
What Happened							
On Saturday morning, 5 October 2024 at 0735Z, a flight instructor (FI) and a student pilot (SP) on-board a Jabiru J400 aircraft with registration ZU-JBA took off on a training flight from Ermelo Aerodrome (FAEO) in Mpumalanga province with the intention to land back at the same aerodrome. The crew intended to conduct take-off-and-landing exercises (circuit training). Visual meteorological conditions (VMC) by day prevailed at the time of the flight which was conducted under the provisions of Part 141 of the Civil Aviation Regulations (CAR) 2011 as amended. At 0850Z, the student pilot configured the aircraft for a touch-and-go landing on Runway (RWY) 13. The aircraft's approach speed was 75 knots (kts) with the flaps set at 20 degrees. According to the FI, the aircraft landed hard on the runway with the right main landing gear. He immediately decided that they abort the take-off and commit to a full-stop landing. Thereafter, they taxied to the hangar. The FI and the SP were not injured during the accident. The FI inspected the aircraft and found that the right gear strut had delaminated; no further damage was observed. The SP had 12.2 hours of flight time at the time of the accident.							

The following weather information was obtained from the pilot via the pilot questionnaire:

Wind Direction	110°	Wind Speed	16Kt	Visibility	CAVOK
Temperature	23°C	Cloud Cover	None	Cloud Base	None
Dew Point	Unknown	QNH	Unknown		



Figure 1: The direction of landing. (Source: Google Earth)



Figure 2: The aircraft post-accident. (Source: Operator)



Figure 3: The delaminated strut. (Source: Pilot)

Findings

1. The FI had a Commercial Pilot Licence (CPL) that was initially issued on 11 September 2024 with an expiry date of 30 September 2025.
2. The aircraft type was endorsed on the FI's licence and logbook. The FI had a Grade 3 instructor rating.
3. The FI had a Class 1 aviation medical certificate that was issued on 24 June 2024 with an expiry date of 24 June 2025 with no medical restrictions.
4. The SP had 12.2 hours at the time of accident.
5. The aircraft had a valid Authority-to-fly (ATF) Certificate that was initially issued on 3 September 2019.
6. The ATF was renewed on 10 June 2024 with an expiry date of 2 July 2025.

7. The approved training organisation (ATO) had a valid ATO Certificate that was issued on 27 January 2022 with an expiry date 30 November 2027.
8. The Certificate of Registration (C of R) was issued to the current owner on 1 October 2021.
9. The aircraft's Certificate of Release to Service (CRS) was issued on 13 June 2024 at 1098.9 hours with an expiry date of 2 July 2025 or at 1198.9 hours, whichever comes first.
10. The aircraft landed hard during a touch-and-go exercise which resulted in the delamination of the right landing gear strut.
Probable Cause
The aircraft's right landing gear strut delaminated due to a hard landing.
Contributing Factor
None.
Safety Action(s)
None.
Safety Message
None.
About this Report
<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 desktop inquiries 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> <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>
Purpose
<i>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 apportion blame or liability.</i>
Disclaimer
<i>This report is produced without prejudice to the rights of the AIID, which are reserved.</i>

This report is issued by:

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