

**LIMITED ACCIDENT INVESTIGATION REPORT**

<b>Reference Number</b>		CA18/2/3/10106					
<b>Classification</b>	Accident	<b>Date</b>	24 January 2022	<b>Time</b>	1043Z		
<b>Type of Operation</b>		Private (Part 94)					
<b>Location</b>							
Place of Departure		Krugersdorp Airport (FAKR)		Place of Intended Landing		Krugersdorp Airport (FAKR)	
Place of Accident		Unprepared field next to the runway at FAKR					
GPS Co-ordinates	Latitude	S26°04'53.9"	Longitude	E27°43'32.4"	Elevation	5499ft	
<b>Aircraft Information</b>							
Registration		ZU-DFP					
Model/Make		Jabiru J400 (Serial Number: 109)					
Damage to Aircraft		Substantial		Total Aircraft Hours		3871.1	
<b>Pilot-in-command</b>							
Licence Valid		Yes	Gender		Male	Age	28
Licence Type		Commercial Pilot Licence (Aeroplane)					
Total Hours on Type		97.2		Total Flying Hours		1666.7	
People On-board	1+1	Injuries	0	Fatalities	0	Other (On Ground)	0
<b>What Happened</b>							
<p>On Monday, 24 January 2022, a pilot and a passenger on-board a Jabiru J400 with registration ZU-DFP were conducting circuit flights and touch-and-go landings at Krugersdorp Airport (FAKR) in Gauteng province. The pilot was testing the aircraft's performance for the passenger who had just purchased it.</p> <p>The pilot had flown three approaches on Runway 08 prior to the accident. The pilot stated that during the fourth approach at approximately 50 knots, the aircraft was stable and it touched down with the tailwind (see Figure 3). He stated that he applied brakes after touchdown, but the aircraft did not slow down. The pilot then noticed that the engine revolutions per minute (rpm) were higher than usual during the landing roll despite the positive back pressure on the throttle. He reported that he tried to pull the throttle back several times, but it did not retard fully. He then applied right rudder to avoid going beyond the end of the runway. The aircraft flipped over (inverted position) on a small open field on the right-side of the runway where it came to rest.</p>							

The occupants of the aircraft were not injured during the accident sequence; the aircraft sustained substantial damage.



**Figure 1:** The aircraft as it came to rest. (Source: Pilot)

#### **What was found**

- The passenger stated that during the landing phase, the aircraft seemed to 'float' down the runway and touched down before the halfway mark on the runway surface (Figure 3).
- Runway 08 is 848 metres (m) in length. The aircraft landed approximately 384 metres from the threshold, which left approximately 464m to the threshold of Runway 26. The landing distance required for a Jabiru is 520m. The aircraft needed an additional 56m to come to a safe stop.
- The pilot had about 70m still remaining after the threshold (Runway 26) for a safe stop. But because the aircraft landed just before the halfway mark on Runway 08, the pilot was unable to bring the aircraft to a safe stop. The pilot elected to turn right to avoid overshooting the runway.





**Figure 2:** Arrows showing landing direction and touchdown point at FAKR Runway 08. (Source: Google Earth)



**Figure 3:** The aircraft with the main landing gears on the ground. (Source: Pilot)

- The last maintenance inspection prior to the accident flight was carried out on 8 December 2021 at 3871.1 airframe hours. The aircraft was issued a Certificate of Release to Service (CRS) on 8 December 2021 with an expiry date of 8 December 2022 or at 3971 hours, whichever occurs first. This was the aircraft's first flight after the maintenance inspection.
- The aircraft was recovered to the Jabiru factory where the aircraft maintenance organisation (AMO) personnel inspected the aircraft. Nothing wrong was found with the throttle after inspection.

**Probable cause:**

The aircraft was unstable on approach, resulting in the aircraft touching down with the tailwind just before the middle of the runway; the pilot could not bring the aircraft to a safe stop in the remaining runway and, therefore, applied right rudder without success in an attempt to avoid overshooting the runway. The aircraft came to a stop on a small open field.

**Safety Actions**

None.

**Safety Message**

Pilots are reminded to always go-around should the approach be unstable, especially when landing in short or limited runways.

**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.*

<b>Disclaimer</b>
<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**