

**LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL**

<b>Reference Number</b>	CA18/2/3/10355						
<b>Classification</b>	Accident	<b>Date</b>	27 July 2023			<b>Time</b>	0700Z
<b>Type of Operation</b>	Training (Part 141)						
<b>Location</b>							
Place of Departure	Hoedspruit Civil Aerodrome (FAHT), Limpopo Province			Place of Intended Landing	Hoedspruit Civil Aerodrome (FAHT), Limpopo Province		
Place of Occurrence	15 metres west of Runway (RWY) 35 at Hoedspruit Civil Aerodrome (FAHT)						
GPS Co-ordinates	Latitude	24° 20' 56.37" S	Longitude	030° 56' 48.12" E	Elevation	1 761 ft	
<b>Aircraft Information</b>							
Registration	ZU-IOZ						
Make; Model; S/N	Savannah Aircraft Africa; Savannah S (Serial Number: 18-11-54-0643)						
Damage to Aircraft	Substantial			Total Aircraft Hours	797		
<b>Pilot-in-command</b>							
Licence Type	Student Pilot Licence (SPL)		Gender	Male		Age	22
Licence Valid	Yes	Total Hours	14.5		Total Hours on Type	14.5	
Total Hours 30 Days	14.5		Total Flying on Type Past 90 Days	14.5			
<b>People On-board</b>	1 + 0	<b>Injuries</b>	0	<b>Fatalities</b>	0	<b>Other (on ground)</b>	0
<b>What Happened</b>							
<p>On Thursday, 27 July 2023, a student pilot on-board a Savannah S aircraft with registration ZU-IOZ took off from Hoedspruit Civil Aerodrome (FAHT) in Hoedspruit, Limpopo province, to conduct an initial solo circuit with the intention to land back at FAHT. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 141 of the Civil Aviation Regulations (CAR) 2011 as amended. Clear weather conditions prevailed at the time of the flight.</p> <p>The instructor stated that he conducted five dual circuit-and-landing exercises on Runway (RWY) 35 with the student pilot, whereafter, he disembarked from the aircraft to release the student pilot to conduct his initial solo flight. The instructor cautioned the student pilot that the aircraft would 'feel lighter' without him (instructor) on-board. The instructor observed the flight from the right of RWY35 whilst maintaining contact with the student pilot via a handheld radio on frequency 126.40-Megahertz (MHz). The take-off was uneventful; however, during the initial approach, the aircraft was high, and the student pilot executed a go-around.</p> <p>In a video footage, <i>during the second approach for RWY35, the aircraft is observed with the wings rocking above the glide slope. The engine power is still high during the round-out (instead of being in idle), the aircraft floats for some distance before touchdown and bounces at a high speed. This is followed by a three-point landing and the subsequent loss of directional control. The aircraft veers off to the left and vacates the runway, collides with and flattens the perimeter fence before it comes to a stop.</i></p>							

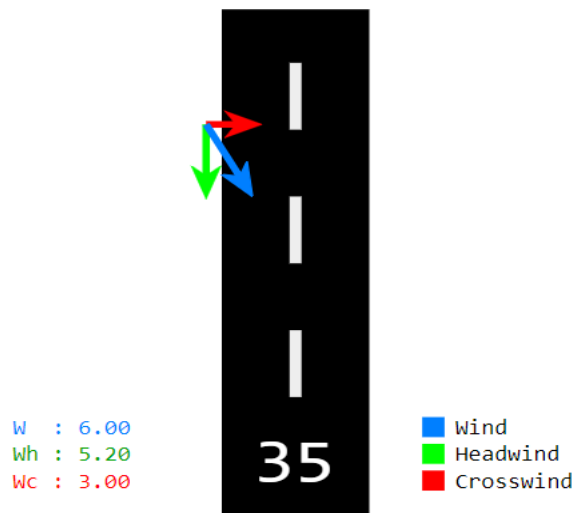
The student pilot was not injured, and the aircraft sustained substantial damage to the propeller, nose gear, underside engine cowling and wings during the landing sequence.



**Figure 1:** An overview of FAHT (the green arrow indicates direction of landing; the green cross shows aircraft position and the red dot indicates instructor position). (Source: Google Earth)

The weather information in the table below was obtained from the South African Weather Service (SAWS) for FAHT on 27 July 2023 at 0700Z. The weather was not a factor in this accident.

Wind Direction	320°	Wind Speed	6 knots	Visibility	9999 m
Temperature	20°C	Cloud Cover	CAVOK	Cloud Base	CAVOK
Dew Point	13°C	QNH	1025		



**Figure 2:** Crosswind component calculation. (Source: E6BX.com)



**Figure 3:** The aircraft as it came to rest. (Source: Pilot)

## Findings

### 1. Personnel Information

- 1.1 The student pilot was initially issued a Student Pilot Licence on 28 July 2022 with an expiry date of 27 July 2023. The student pilot had flown a total of 14.5 hours under instruction on the aircraft type, according to the pilot's logbook.
- 1.2 The student pilot was issued a Class 2 aviation medical certificate on 19 July 2023 with an expiry date of 19 July 2027 with no limitations.
- 1.3 The student pilot, a Dutch national, had since returned to his home country and will resume his training at a later date.

2. Aircraft Information

- 2.1 The last annual inspection that was conducted on the aircraft prior to the accident flight was certified on 7 July 2023 at 787.0 airframe hours. Since the said inspection, a further 10.0 hours were recorded.
- 2.2 The aircraft had a valid Authority to Fly (ATF) that was initially issued on 5 August 2019. The ATF was reissued on 23 August 2022 with an expiry date of 30 September 2023.
- 2.3 The aircraft Certificate of Registration (C of R) was issued to the present owner on 12 June 2019.
- 2.4 The aircraft was issued a Certificate of Release to Service (CRS) on 19 July 2023 with an expiry date of 30 September 2023.

3. Conclusion

- 3.1 The aircraft approached RWY 35 at a high airspeed which led to floating and deep landing. The aircraft touched down hard and bounced several times; the pilot lost directional control and the aircraft veered off to the left of RWY 35.

**Probable Cause(s)**

The aircraft approached RWY 35 at a high airspeed which caused it to float and land deep before it touched down hard and bounced a few times. This caused the pilot to lose directional control and the aircraft veered off to the left of RWY 35.

**Contributing Factor(s)**

Failure to execute a go-around after noticing that the aircraft was too fast on approach.

**Safety Action(s)**

None.

**Safety Recommendation**

Instructors and Approved Training Organisations (ATO) are to ensure that the student pilots are ready for solo flights prior to releasing them on any exercise which will require an initial solo flight for a particular competency. This may be achieved through dual assessment by a fellow pilot with similar or higher competencies/experience than the instructors responsible for the training of the student pilots.

**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 possible 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**