



**REPUBLIC OF NAMIBIA**

**MINISTRY OF WORKS AND TRANSPORT**

# **Directorate of Aircraft Accident and Incident Investigations**

**Accident Reference: ACCID 013022/01-01**

## **Aircraft Accident Investigation Final Report**

**JABIRU 2 V5-UZI**

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**RELEASE DATE: 7<sup>TH</sup> JUNE 2022**

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# Aircraft Accident Report

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**DESCRIPTION OF OCCURRENCE:** (LOC-G) Loss of control on ground.

**TYPE OF OPERATION:** Private.

**AIRCRAFT TYPE:** Jabiru 2 (V5-UZI)

**LOCATION:** GPS: 22°38'28.4"S 14°40'04.6"E Farm Blakeway Swakop River Plots . Swakopmund Namibia

**DATE AND TIME:** 30<sup>th</sup> January, 2022(12:15 UTC).

## Foreword

This report presents the information, data analysis, conclusions, and safety recommendations reached during the investigation. The purpose of the investigation was to establish the circumstances surrounding this accident.


In accordance with the provisions of Annex 13 to the Convention on International Civil Aviation Organization, the accident's analysis, conclusions, and safety recommendations contained therein are intended neither to apportion blame nor to single out any individual or group of individuals. The main objective was to identify the systematic deficiencies and draw lessons, from the occurrence, which might help to prevent accidents and incidents in the future. To this end, many a time, the reader may be interested in whether or not an issue was a direct cause of the accident (that has already taken place), whereas the investigator is mainly concerned with the prevention of future accidents/incidents.

As a result, the usage of this report for any purpose other than (the letter and spirit of Annex 13 and other relevant statutes) prevention of similar occurrences in the future might lead to erroneous interpretations and applications.

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## **ABBREVIATION**

AD	-	Airworthiness Directives
AMO	-	Aircraft Maintenance Organization
AME	-	Aircraft Maintenance Engineer
DAAII	-	Directorate of Aircraft Accident and Incident Investigation
ELT	-	Emergency Locator Transmitter
ICAO	-	International Civil Aviation Organization
LOC-G	-	Loss of Control on Ground
NCAA	-	Namibia Civil Aviation Authority
NAMCARs	-	Namibian Civil Aviation Regulations
PPL	-	Private Pilot License
MPI	-	Mandatory Periodic Inspection
SB	-	Service Bulletins
UTC	-	Universal Time Co-ordinated

		Ministry of Works and Transport			ACCID/013022/01-01	
		<b>DIRECTORATE OF AIRCRAFT ACCIDENT INVESTIGATION</b> <b>ACCIDENT REPORT – EXECUTIVE SUMMARY</b>				
<b>Aircraft Registration</b>	V5-UZI	<b>Date of Accident</b>	30 <sup>th</sup> January , 2022		<b>Time of Accident</b>	12:15 UTC
<b>Type of Aircraft</b>	JABIRU 2		<b>Type of Operation</b>		Private	
<b>Pilot- In - command License Type</b>	PA 73386		<b>Age</b>	30	<b>License Valid</b>	VALID
<b>Pilot-In-command Flying Experience</b>	Total Flying Hours		74.4	<b>Hours on Type</b>	74.4	
<b>Last point of departure</b>	FYSM (Swakopmund)					
<b>Next point of intended landing</b>	Farm Blakeway (Swakopmund) FYBL					
<b>Location of the accident site with reference to easily defined geographical points (GPS readings if possible)</b>						
GPS: 22°38'26.8"S 14°40'06.8"E Farm Blakeway (Swakopmund)						
<b>Meteorological Information</b>	Wind Direction: 340 ° , Wind speed: 31 kt, Temperature: 20° C Visibility: clear, Dew point: 15 ° C QNH 1012					
<b>Number of people on board</b>	1+1	<b>No. of people injured</b>	2	<b>No. of people killed</b>	0	
<b>Synopsis</b>						
<p>On the 30<sup>th</sup> January 2022, at around 1200 UTC a privately owned, Namibian registered experimental aircraft got airborne at Swakopmund airport for a private flight to Farm Blakeway about 10 km away. On Board were the pilot and one passenger.</p> <p>According to the pilot, the flight was uneventful and routine. The pilot landed deep on runway 24 and after touchdown with the main landing gear (nose still in the air) lost directional control due to severe crosswind gusts. Which resulted in the pilot veering off the runway into the deep soft sand. The nose wheel sank into the wet sand and collapsed.</p> <p>The aircraft sustained some damage to the landing gear which collapsed and a few cracks. The pilot and passengers were injured and taken to hospital.</p> <p>The Directorate of Aircraft Accident and Incident Investigation (DAAII) was informed telephonically by the son of the owner. The Minister of Works and Transport Ministry was responsible for the release of the official final accident report.</p> <p>The weather was fine with good visibility. However, the gusty winds affected the directional control on the ground leading to a runway excursion.</p> <p>The pilot was a Namibian citizen who was a holder of a Private Pilot License.</p> <p>The last Annual Inspection (AI) was carried out and certified on 18/11/ 2021, in accordance with the Jabiru Maintenance Manual and NAMCARS 2001 by a Namibian AMO at 968.7 hours. The Certificate of Safety for Flight was issued on 18/11/2021 with expiry at 1074.9 hours or at 18 Nov 2022. The approval was issued in accordance with Part 145 of the NAMCARS 2001. At the time of the accident, the aircraft accumulated a further 16.6 hours since the last (AI) was certified.</p>						
<b>Cause:</b> Loss of control (LOC-G).						
<b>Contributing factor (s):</b>						
Gusty crosswinds						



## AIRCRAFT ACCIDENT REPORT

Name of Owner/Operator : Derek Moore  
Manufacture : Jabiru Aircraft  
Model : J170 D  
Nationality : Namibian  
Registration : V5 - UZI  
Location : Farm Blakeway GPS: 22°38'26.8"S 14°40'06.8"E  
Date : 30th January , 2022 Time: 12:15 UTC

*All times given in this report are in Co-ordinated Universal Time (UTC).*

### Disclaimer:

The report is given without prejudice to the rights of the Directorate of Aircraft Accident and Incidents Investigations, which are reserved.

### Purpose of the Investigations:

In terms of the Namibia Civil Aviation Act (Act No. 6 of 2016) and ICAO Annex 13, this report was compiled in the interest of the promotion of aviation safety and the reduction of risk of aviation accidents or incidents and **not to establish blame or legal liability.**

This report contains facts relating to aircraft accidents or incidents that have been determined at the time of issue. The report may therefore be revised should new and substantive facts are made available to the investigator (s).

## 1. FACTUAL INFORMATION

### 1.1 History of Flight

- 1.1.1 On the 30<sup>th</sup> January 2022, a Namibian registered Jabiru aircraft got airborne from a private farm and flew to Swakopmund Airport. The pilot and a passenger were on-Board the aircraft.
- 1.1.2 According to the pilot and the passenger who was the owner and also an experienced pilot, after landing at they did a few circuits and four landings. They then decided to leave and head back to the farm, the takeoff was normal, as well as the cruise and approach for FYBL. The flight was uneventful and routine. The pilot landed deep on runway 24 and after touchdown with the main landing gear (nose still in the air) they lost directional control due to severe crosswind gusts. Which then resulted in the pilot veering off the runway into the deep soft sand.
- 1.1.3 The soft wet sand caused the landing gear to collapse.
- 1.1.4 The aircraft was substantially damaged. The pilot sustained minor injuries, the passenger sustained fractures and was taken to the hospital for treatment.

### 1.2 Injuries to Persons

Injuries	Pilot	Crew	Pass.	Other
Fatal	-	-	-	-
Serious	1	-	-	-
Minor	-	-	1	-

### 1.3 Damage to Aircraft

#### 1.3.1 The aircraft sustained minor damage.



*Figure 1: The aircraft as it came to rest.*



*Figure 2: The aircraft as it veered off the runway into wet sand.*

### 1.4 Other Damage

#### 1.4.1 There was no other damage.



## 1.5 Personnel Information

### 1.5.1 Pilot-in-in command

Nationality		Namibian			
Licence No	PA73386	Gender	Male	Age	30
Licence valid		Valid	Type Endorsed	n/a	
Type Ratings		None			
Medical Expiry Date		30/09/2022			
Restrictions		None			
Previous Accidents		Unknown			

Total Hours	74.4
Total Past 90 Days	4.1
Total on Type Past 90 Days	4.1
Total on Type	74.4

## 1.6 Aircraft Information



**Figure 3: Jabiru 170 –V5-UZI (FILE PHOTO)**

The J170 was developed with the flying schools in hotter climates in mind. It is the J160 with the longer wings of the J230 and a bigger elevator. The longer wings allow it to climb faster in hot conditions. The longer wings also provide more float on landing which is helpful when learning to land. Jabiru airframes are manufactured using Fibre Reinforced Plastic (FRP) technologies. The Jabiru aircraft is powered by a Jabiru 4 cylinder 4 stroke 2200 cc or a 6 cylinder 3300 cc air-cooled engine.

### Airframe:

Type	JABIRU J170	
Serial No.	362	
Manufacture	JABIRU	
Year of Manufacture	2015	
Total Airframe Hours (At time of Accident)	985.3	
Last MPI (Date & Hours)	18/11/2021 at 968.7 airframe hours	
Hours since Last MPI	16.6 hours	
C of safety for flight	18/11/2021 valid till 18/11/2022	
Operating Categories	Standard	

## Engine:

Type	Aero engines	
Serial No.	S/N 33A2670	
Hours since New	985.3	

## 1.7 Meteorological Information

Wind direction	340°	Wind speed	31kts	Visibility	cavok
Temperature	15° C	Cloud cover	clear	Cloud base	Cavok
QNH	1012				

## 1.8 Aids to Navigation

1.8.1 The aircraft was equipped with standard navigation equipment as approved by the Regulator.

## 1.9 Communications.

1.9.1 The aircraft was equipped with standard communication equipment as approved by the Regulator for the type.

## 1.10 Aerodrome Information

1.11 The accident occurred during daylight at Farm Farm Blakeway which is about 10km from Swakopmund airfield

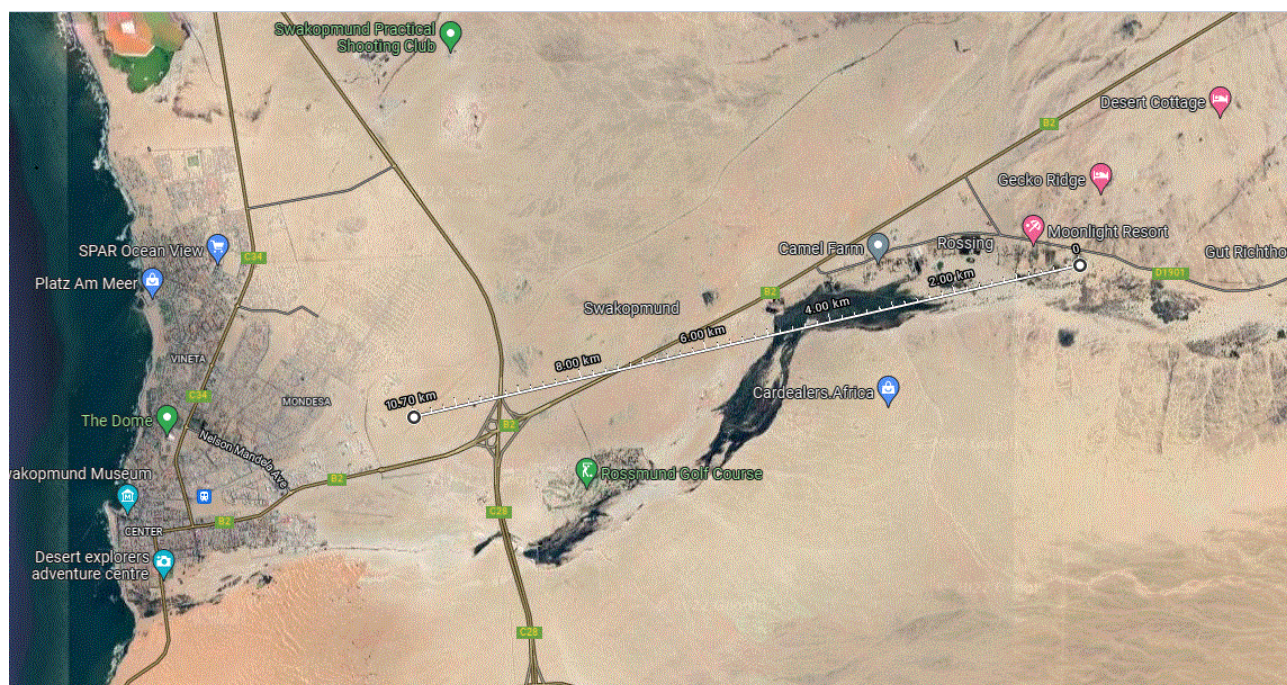


Figure 4: Swakopmund airfield to accident site (google earth)





*Figure 5: Private aerodrome indicating direction and point of impact (Google earth).*

## **1.11 Flight Recorders**

1.11.1 The Aircraft was not equipped with a flight data recorder (FDR) or a cockpit voice recorder (CVR) nor was it required by the relevant aviation regulations.

## **1.12 Wreckage distribution and Impact Information**

The accident occurred at a private airstrip approximately 10 km from Swakopmund town. The aircraft's nose gear collapsed.

## **1.13 Medical and Pathological Information**

1.13.1. The pilot medical certificate was valid.

## **1.14 Fire**

1.14.1. There was no evidence of fire inflight or after the impact.

## **1.15 Survival Aspects.**

1.15.1 This was a survivable accident as the impact forces were minimal.

## **1.16 Tests and Research.**

1.16.1. None was conducted and none was required.

## **1.17 Organizational and Management Information.**

1.17.1. The aircraft was flown for private use.

## **1.18 Additional Information**

1.18.1 None

## **1.19 Useful or Effective Investigation Techniques.**

1.19.1 Not applicable.

## **2. ANALYSIS**

### **2.1. Man**

The pilot was issued a Private Pilot Licence (Aeroplane) on 07 October 2021 the license was valid indefinitely provided the holder holds a valid medical certificate and maintains proficiency as per regulations. He was in possession of a valid aviation medical certificate. He was well-rested and was familiar with the aircraft and airstrip. Records indicate he flew only 4.1hrs in the last 90 days.

### **2.2 Machine (Aircraft)**

The last MPI was conducted on 18 November 2021 at 968.7 airframe hours. The aircraft had flown a total of 16.6 hours since its last MPI. The aircraft was issued a Certificate of safety for flight (CSF) on 18 November 2021 with an expiry date of 18/11/2022 or at 1074.9 hours, whichever occurs first.

On-site investigation and further post-accident inspection of the wreckage (airframe and engine) revealed no pre-existing failures prior to the accident; all damage was caused during the accident. Records indicated that the aircraft was airworthy at the time.

There were no recorded defects before the flight. The aircraft was equipped with standard navigation and communication by the regulator for the Aircraft type.

### **2.3. Environment**

Swakopmund Airfield does not provide weather information but rather a forecast. The investigator obtained METAR for Walvis Bay airport (FYWB). The wind was gusting at 31 knots in a northerly direction of 340 degrees. The temperature was fine at 15 degrees with QNH 1012

The aircraft encountered severe crosswind gust that pushed the experimental built light aircraft to the left, forcing it to lose directional control. The aircraft then veered off the runway into the soft desert sand which had received some rain the previous day. This caused the aircraft to stop abruptly collapsing the front gear.

## **3. CONCLUSION**

### **3.1 Findings**

- 3.1.1 The maintenance records indicated that the aircraft was certified, equipped and maintained in accordance with existing regulations and approved procedures.
- 3.1.2 The aircraft had a valid Certificate of Safety for flight.
- 3.1.3 There was no evidence of airframe failure or system malfunction prior to the accident.
- 3.1.4 The pilot had a valid Private Pilot Licence.

### **3.2. Cause/s**

- 3.2.1. Loss of control (LOC-G).

### **3.3 Contributing factor**

- 3.3.1 . Gusting crosswind.

## **4.0 Safety Recommendations**

### **4.1 None**



Hafeni Mweshixwa  
Investigator-in-Charge

Released by:



Hon. John Mutorwa, MP  
**MINISTER: MINISTRY OF WORKS AND TRANSPORT**

Date: **7.6.2022**

