

REPUBLIC OF NAMIBIA

MINISTRY OF WORKS AND TRANSPORT

DIRECTORATE OF AIRCRAFT ACCIDENT INVESTIGATION

CIVIL AIRCRAFT ACCIDENT REPORT

ACCID/050523/01-04

OPERATION : PRIVATE

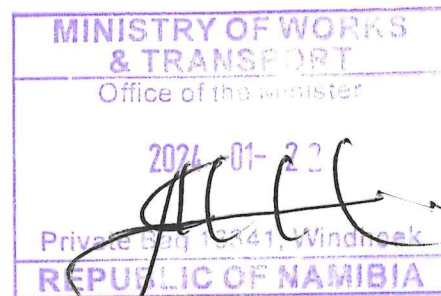
**AIRCRAFT
REGISTRATION : V5-WOT**

**LOCATION : LAPA LANGE
NAMIBIA**

DATE : 05 MAY 2023



REPUBLIC OF NAMIBIA



MINISTRY OF WORKS AND TRANSPORT

Directorate of Aircraft Accident and Incident Investigations

Accident Reference: ACCID/05052023/01-04

Aircraft Accident Investigation Final Report

AIRCRAFT TYPE & REGISTRATION: C182 (V5-WOT)

RELEASE DATE :



Source: Owner

Aircraft Accident Report

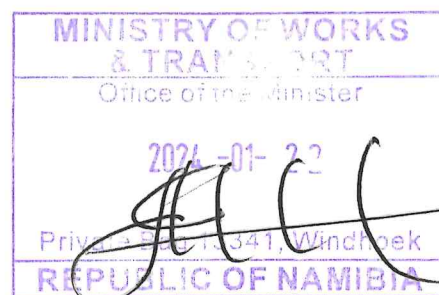
DESCRIPTION OF OCCURRENCE: Loss of control in flight and crashed during the landing phase.

TYPE OF OPERATION: Private.

AIRCRAFT TYPE & REGISTRATION: C182 (V5-WOT)

LOCATION: GPS: 24° 49' 11" S 018° 11' 25" E Lapa Lange
Airstrip

DATE AND TIME: 2023/05/05 UTC Time of accident 14:00



Foreword

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

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.

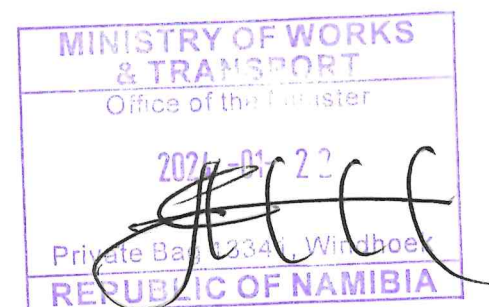
As a result, the usage of this report for any purpose other than (the latter and spirit of Annex 13 and other relevant statutes) prevention of similar occurrences in the future might lead to erroneous interpretations and applications.



TABLE OF CONTENTS

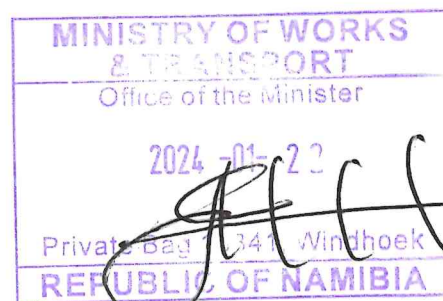
PAGE

a) FORWARD	<i>i</i>
b) TABLE OF CONTENT	<i>ii</i>
c) ABBREVIATIONS	<i>iii</i>
1. EXECUTIVE SUMMARY.....	1
1. FACTUAL INFORMATION.....	2
1.1. HISTORY OF THE FLIGHT.....	2
1.2 INJURIES TO PERSONS.....	3
1.3 DAMAGE TO AIRCRAFT.....	3
1.4 OTHER DAMAGE	4
1.5 PERSONNEL INFORMATION	4
1.6 AIRCRAFT INFORMATION	5
1.7 METEOROLOGICAL INFORMATION.....	5
1.8 AIDS TO NAVIGATION	5
1.9 COMMUNICATIONS	5
1.10 AERODROME INFORMATION	5
1.11 FLIGHT RECORDERS	6
1.12 WRECKAGE AND IMPACT INFORMATION	6
1.13 MEDICAL AND PATHOLOGICAL INFORMATION	6
1.14 FIRE	6
1.15 SURVIVAL ASPECTS	6
1.16 TEST AND RESEARCH	6
1.17 ORGANIZATIONAL AND MANAGEMENT INFORMATION.....	7
1.18 ADDITIONAL INFORMATION.....	7
1.19 USEFUL INVESTIGATIVE TECHNIQUES	7
2.0 ANALYSIS	7
3.0 CONCLUSIONS.....	7
3.1 FINDINGS	7
3.2 PROBABLE CAUSE	8
3.3 CONTRIBUTORY FACTORS.....	8



ABBREVIATION

AMO	-	Aircraft Maintenance Organization
PPL	-	Private Pilot License
DAAII	-	Directorate of Aircraft Accident and Incident Investigation
ICAO	-	International Civil Aviation Organization
CAVOK	-	Ceiling and Visibility Ok
NCAA	-	Namibia Civil Aviation Authority
MPI	-	Mandatory Periodic Inspection
UTC	-	Universal Time Co-ordinated
FDR	-	Flight data recorder
LOC-I	-	Lost of control in flight
CVR	-	Cockpit voice recorder

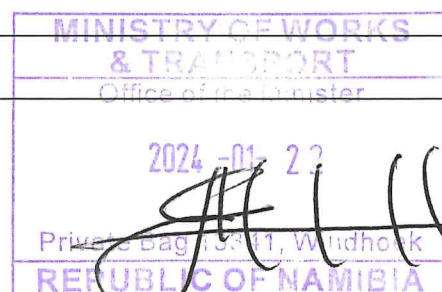




Ministry of Works and Transport

DIRECTORATE OF AIRCRAFT ACCIDENT INVESTIGATION ACCIDENT REPORT – EXECUTIVE SUMMARY

Aircraft Registration	V5-WOT	Date of Accident	5 th May, 2023	Time of Accident	12:00 UTC
Type of Aircraft	CESSNA 182	Type of Operation	Private		
Pilot- In - command License Type	PPL(PA73530)	Age	54	License Valid	Valid
Pilot-In-command Flying Experience	Total Flying Hours	99.8	Hours on Type	99.8	
Last point of departure	FYWE				
Next point of intended landing	FYLL				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)					
GPS: 24° 49' 11" S 018° 11' 25" E Lapa Lange Airstrip					
Meteorological Information	Wind Direction: 010 °, Wind speed: 12 kts CAVOK, Temperature: 30° C Dew point: unknown, Air pressure: unknown				
Number of people on board	1+1	No. of people injured	0	No. of people killed	0
Synopsis					
<p>On the 05th May 2023, at around 11H00 UTC time, a privately owned Namibian registered aircraft V5-WOT got airborne from Eros airport for a private flight to Lapa Lange airstrip (FYLL). On Board were the pilot and one passenger.</p> <p>The flight from Eros airport to Lapa Lange airstrip (FYLL) was one hour. On approach to FYLL the pilot called the operator of the airstrip by mobile phone from the air to confirm the joining procedures and the surface condition at the airstrip at that moment. The operator confirmed that the surface conditions were fine and the prevailing wind was North West and mild. The pilot flew a wide circuit and then a low pass by the runway for inspection and familiarization with the runway and airfield conditions. After the low fly pass was completed the aircraft made a final approach for runway 01.</p> <p>The approach phase was normal until almost when the aircraft was about to touch down on the runway. The aircraft encountered a severe windshear from the west that lifted the aircraft over the fence of the runway and crushed into the vegetation. The aircraft stroked a sheppard tree first, uprooted the tree and take it along for a distance of 15 meters. It stroked another tree and came to a stop facing the easterly direction. The aircraft sustained substantial damage especially to the undercarriage, berry, right wing, propeller and a lot of dent of the airframe. There were no injuries sustained by the pilot neither by the passenger.</p> <p>Directorate of Aircraft Accident and Incident Investigation (DAAII) was informed telephonically by an eye witness on the same day. DAAII appointed an Investigator- in- charge to conduct the investigation and issue the final report. The investigation was commenced immediately.</p> <p>The Minister of Works and Transport Ministry was responsible for the release of the official final accident report</p> <p>The aircraft had a valid Certificate of airworthiness issued by the Namibian Civil Aviation Authority on the 15/07/2022 with an expiry date of 13/07/2023. Certificate number 431/2018.</p>					
Cause:. Loss of control(LOC-I)					
Contribution Factor: shear wind gust					



- 1.1.4 On final approach for runway 01 just before touched down the aircraft experienced severe windshear from the left (west) that lifted the aircraft from the runway over the fence where it crashed.
- 1.1.5 The aircraft first stroked a shepherd tree, uproot the tree, and dragged it for about 15 meters before struck another tree and came to rest facing 90 degrees from the direction of flight. The aircraft was substantially damaged but the pilot and the passenger did not sustained any injuries.

1.2 Injuries to person

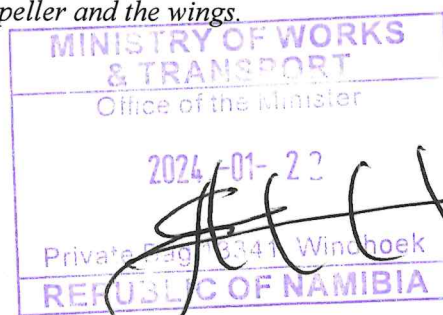
Injuries	Pilot	Crew	Pass.	Other
Fatal	0	-	0	-
Serious	0	-	0	-
Minor	0	-	0	-
Total	0		0	

1.3 Damage to Aircraft

The aircraft was substantially damaged.



Figure 1: Damage to the lower fuselage, undercarriage, propeller and the wings.



1.4 Other Damage

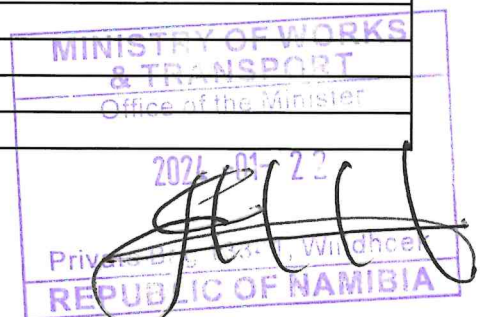
1.4.1 There was damaged to two shepperd trees.



Figure 2: Damage to the two shepperd tree..

1.5 Personnel Information

Nationality		Namibian			
Licence No	PA73530	Gender	Femalee	Age	71
Licence valid		Valid	Type Endorsed	Yes	
Type Ratings		SEP (land)			
Medical		valid			
Restrictions		Valid with corrective for defective near vision.			
Previous Accidents		unknown			
Total Hours		99.8			
Total Past 90 Days		53.4			
Total on Type Past 90 Days		53.4			
Total on Type		99.8			
		<div>MINISTRY OF WORKS & TRANSPORT Office of the Minister</div>			



1.6 Aircraft Information

Airframe:

Type	C 182
Manufacture	Textron Aviation
Total Airframe Hours (At time of Accident)	5365.2
Last MPI (Date & Hours)	07-02-2023@ 5326.7
Hours since Last MPI	38.5
C of Airworthiness	15-07-2022 (Expiry 13-07-2023)
Operating Categories	Standard

Engine:

Type	Continental
Serial No.	069965-R
Hours since New	732.8

Propeller

Type	Hartzell
Part no	PHC-G3YF-1RF
S/N	NT371B

1.7 Meteorological Information

Wind direction	010 °	Wind speed	12G26kts @12:00	Visibility	CAVOK
Temperature	30°C	Cloud cover	-	Cloud base	-
Dew point	Unknown				

1.8 Aids to Navigation

- 1.8.1 The aircraft was equipped with standard navigational 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.
There were no recorded defects with the communication system prior to the accident flight

1.10 Aerodrome Information

The aerodrome is at an elevation of 3897 ft above sea level. There is a gravel runway 01/19 measuring 1.6 km and 16 meters wide. There are two wind socks on the airstrip the main one is located midway of the runway and the other close to the hangar. The runway is fenced off with a two meter animal proof fence.

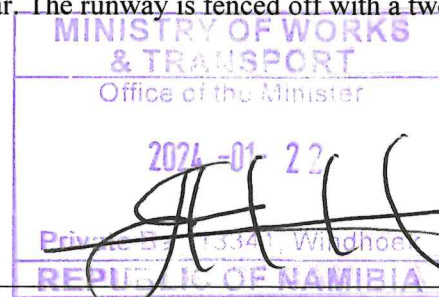




Figure 3 : Lapa lange airstrip.

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 for this type.

1.12 Wreckage distribution and Impact Information

- 1.12.1 The aircraft wreckage was intact. No part detached from the main wreckage. The aircraft impacted two trees before it came to a stop.

1.13 Medical and Pathological Information

- 1.13.1. No medical or pathological investigations were conducted because of this accident, nor were they Required.

1.14 Fire

- 1.14.1. There was no pre- or post-impact fire.

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 done and none was required.



1.17 Organizational and Management Information.

- 1.17.1. This was a private flight conducted under the provisions of Part 91 of the Civil Aviation Regulations.

1.18 Additional Information

- 1.18.1 No

1.19 Useful or Effective Investigation Techniques.

- 1.19.1 Not applicable.

2. ANALYSIS

MACHINE

- 2.1 The records obtained from the flight folio and aircraft manual reveal that the aircraft was airworthy at the time of the accident. ALL inspection were carried out.

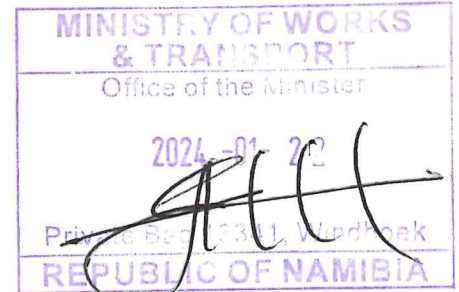
2.2 ENVIROMENT

The weather was fine during the approached phase, but the unforeseen suddenly wind shear that develop on the airstrip made the pilot to loose control.

2.3 PILOT

The pilot had a Private Pilot License (PPL). According to the logbook the pilot flew a total of 99.8 hours, of which all were on the aircraft type at the time of the accident.

The pilot had a valid class 2 aviation medical certificate that was issued on 24 October 2022 with an expiry date of 31 October 2023.



3. CONCLUSION

3.1 Findings

- 3.1.1 The aircraft had a valid Certificate of airworthiness issued by the Namibian Civil Aviation Authority on the 15/07/2022 with an expiry date of 13/07/2023. Certificate number 431/2018.
- 3.1.2 The pilot a Namibian citizen was a holder of a Private Pilot License (PPL) PA 73530 issued by the Namibian Civil Aviation Authority and a valid medical certificate valid until 31/10/2023.
- 3.1.3 The airstrip runway was found to be in a good condition for aviation activities.
- 3.1.4 The last Maintenance inspection that was carried out on the aircraft was the Mandatory Periodic Inspection. The inspection was certified on the 13th of February 2023 at 5326.73 airframe hours. The aircraft flew 38.5 hours since the last inspection was carried out.
- 3.1.5 There was no defect reported prior to the accident and the maintenance records indicated that the aircraft was certified, equipped and maintained in accordance with existing regulations and approved procedures.

3.2. Cause

3.2.1 Loss of control in flight (LOC-I).

3.3.1 Contributing factor

3.3.1 Windshear.

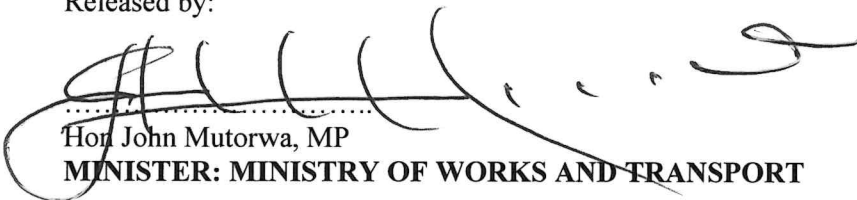
4.0. Safety Recommendations: None



Thomas H. Herman
Investigator-in-Charge

Date: 22/01/2024

Released by:



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

Date: 22.1.2024

