



REPUBLIC OF NAMIBIA

MINISTRY OF WORKS AND TRANSPORT

**DIRECTORATE OF AIRCRAFT ACCIDENT AND
INCIDENT INVESTIGATION**

CIVIL AIRCRAFT ACCIDENT REPORT

ACCID/10082021/01-02

OPERATION : PRIVATE

AIRCRAFT : V5- MPL

LOCATION : FARM ZUKHOFF WEST

DATE : 08 OCTOBER 2021



REPUBLIC OF NAMIBIA

MINISTRY OF WORKS AND TRANSPORT

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AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATIONS

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Our Ref: 3/48

Date: 21 February 2020

To : Honorable Minister of Works and Transport

From : Director: Aircraft Accident and Incident Investigations

RE: AIRCRAFT INCIDENT REPORT

Please find attached the final report on the above subject accident. In accordance with the International Civil Aviation Organization Annex 13 – Aircraft Accident and Incident Investigation – Standard 6.13, final reports shall be published as soon as possible in the interest of accident prevention.

It is recommended that copies of these final reports be made available to the public and other interested parties upon request. Your approval is therefore sought to release the said reports.

Magnus Abraham

DIRECTOR: AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATIONS

"Effective and Efficient Delivery of Service"

All official correspondence must be addressed to the Executive Director



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 accident.

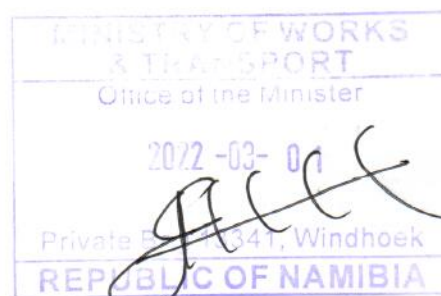
In accordance with the provisions of Annex 13 to the convention on International Civil Aviation Organization, and Aviation Act, (Act No. 6 of 2016), the accident's analysis, conclusions, and safety recommendations contained therein are intended neither to apportion blame nor to single out any individual 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, usage of this report for any purpose other than (the latter and spirit of Annex 13 and Aviation Act, (Act No. 6 of 2016) or other relevant statutes) prevention of similar occurrences in the future might lead to erroneous interpretations and applications.



ABBREVIATIONS

AC	-	Advisory Circular
ACCID	-	Accident
AD	-	Airworthiness Directive
AMO	-	Approved Maintenance Organization
ATC	-	Air Traffic Controller
°C	-	Degrees Celsius
C. of .A	-	Certificate of Airworthiness
C. of .R	-	Certificate of Registration
CPL	-	Commercial Pilot License
CVR	-	Cockpit Voice Recorder
ELT	-	Emergency Locator Transmitter
FAJO	-	Johannesburg Oceanic
FDR	-	Flight Data Recorder
FL	-	Flight Level
ICAO	-	International Civil Aviation Organization
KIAS	-	Indicated Airspeed in Knots
NAMCARS	-	Namibia Civil Aviation Regulations
NE	-	North east
NM	-	Nautical Miles
MHZ	-	Mega Hertz
MPI	-	Monthly Periodic Inspection
POH	-	Pilot Operating Handbook
QNH	-	Altitude above Sea Level based on Local Station Pressure
SAR	-	Search and Rescue
SB	-	Service Bulletin
STA	-	Aircraft Station
UTC	-	Universal Time Coordinated
VFR	-	Visual Flight Rules



ABBREVIATION

ATPL	-	Airline Transport Pilot License
AGL	-	Above Ground Level
UTC	-	Universal Time Co-ordinate
MPI	-	Mandatory Periodic Inspection
AD	-	Airworthiness Directive
SB	-	Service Bulletins
CRM	-	Crew Resources Management
FDR	-	Flight Data Recorder
CVR	-	Cockpit Voice Recorder
AOC	-	Air Operated Certificate
ICAO	-	International Civil Aviation Organization
C of A	-	Certificate of Airworthiness
C of R	-	Certificate of registration
AMO	-	Aircraft Maintenance Organization
CPL	-	Commercial Pilot License
ETA	-	Estimated Time of Arrival
FYKH	-	Kiripotib Airfield
Km	-	Kilometers
SOPs	-	Standard Operating Procedures
NM	-	Nautical Miles





ACCID / 10082021 / 01-02

MINISTRY OF WORKS AND TRANSPORT
ACCIDENT REPORT – EXECUTIVE SUMMARY

Aircraft Registration	V5_MPL	Date of Accident	08 Oct 2021	Time of Accident	16:00 UTC
Type of Aircraft	CESSNA SKYHAWK 172	Type of Operation	Private		
Pilot-in-command license type	Private pilot	Age	72	License valid	Yes
Pilot-in-command flying experience	Total flying hours	2007.0	Hours on type	1432.0	
Last point of departure	Farm Zuckhof West , 80 km East of Outjo, Namibia				
Next point of intended landing	Farm Leyte , 100 km East of Outjo, Namibia				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)					
Farm Zuckhof West, 80 km east of Outjo, Kunene Region, Namibia S 19° 40 22 E 016° 37 17					
Meteorological Information	CAVOK Temp 34 c Wind 340° / 12 Kts				
Number of people on board	1	No. of people injured	0	No. of people killed	1
Synopsis					

On the 08 Oct 2021 around 16:00 UTC, a Cessna Skyhawk 172 with Registration V5-MPL took off from the gravel road at Farm Zuckhof West with one crew on board. The intention was to fly back to the pilot's other farm 20 km to the East after doing some fire spotting in the area. During the takeoff phase while trying to avoid power lines, the pilot lost control and crashed next to the road near the farm house. The aircraft was destroyed during the crash. The pilot was injured. The farm workers seeing the aircraft departed rushed to the accident scene where they helped the pilot out of the wreckage. The pilot was transferred by ambulance to the Otjiwarongo hospital.

The Directorate of Aircraft Accident and Incident Investigations (DAAII) in Namibia was informed by the Air Navigation Services (ANS) Search and Rescue section telephonically about the accident and an official investigation commenced the next day.

The weather at the time of the accident was CAVOK with light winds.

The last Annual Inspection (AI) was carried out and certified on 13 November 2020, in accordance with the Cessna Maintenance Manual and NAMCARS 2001 by a Namibian AMO with approval No. 066, issued on the 20 Aug 2011 with the expiry date of the 4 Jan 2022 at the total of 3665.7 air frame hours (3558.6 Hobbs). The approval was issued in accordance with Part 145 of the NAMCARS 2001. At the time of the accident, the aircraft accumulated a further 15 hours since the last (AI) was certified.

Probable Cause

Loss of control after takeoff.





AIRCRAFT ACCIDENT REPORT

Name of Owner / Operator : Dirk Coetzee
Manufacturer : Cessna A/C Corp.
Model : Cessna Skyhawk 172
Nationality : Namibian
Registration Marks : V5 - MPL
Place : Farm Zuckhof West, 80 km northeast of Outjo Namibia
Date : 08 Oct 2021

All times given in this report are Co-ordinated Universal Time (UTC), unless otherwise stated.

Disclaimer:

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

Purpose of the Investigations:

In terms of the 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 accident or incidents and **not to apportion blame or establish legal liability.**

This report contains facts relating to aircraft accidents or incidents which have been determined at the time of issue.

The report may therefore be revised should new and substantive facts be made available to the investigator.

1. FACTUAL INFORMATION

1.1 History of Flight

1.1 History of Flight

- 1.1.1 On 08th October 2021 at around 16:00 UTC, a Cessna Skyhawk (C 172) with Registration No. V5-MPL took off from a district road on the Farm Zuckhof Wes with one crew on board. The intention was to fly back to his other farm 20 km to the east.
- 1.1.2 Before the flight commenced the pilot consulted with fire teams on the road to the where about of fires to tackle as he was doing fire spotting in the area for them.
- 1.1.3 The pilot used an open clear section of road near the farm house as runway. After getting airborne the pilot saw the Power line crossing the road at 90° in front of him and execute an evasive maneuver but lost control of the aircraft and nose dive the aircraft steeply into the ground next to the road.
- 1.1.4 The prevailing weather was CAVOK with light winds.



1.1.5 The pilot sustained leg and head injuries.

1.1.6 The farm manager heard the crash while entering the house and rushed to the accident scene 150 meters away. At the wreckage he helped the unconscious pilot out of the wreckage. An ambulance was summoned to the scene and the injured pilot was transferred to the Otjiwarongo hospital.

1.2 Injuries to Persons

Injuries	Pilot	Crew	Pass.	Other
Fatal	1	-	-	-
Serious	-	-	-	-
Minor	-	-	-	-
None	-	-	-	-

1.3 Damage to Aircraft

1.3.1 The aircraft was destroyed on impact.



Image 1 Aircraft crashed next to the district road.

1.4 Other Damage

1.4.1 There were no other damages.

1.5 Personnel information

Nationality		Namibian			
Licence No	PPL	Gender	Male	Age	72
Licence valid		Yes	Type endorsed	Yes	
Ratings		None			
Medical expiry date		30 November 2022			
Restrictions		None			
Previous accidents		Not known			

Flying Experience:

Total hours	2007.0
Total past 90-days	N / A
Total on type past 90-days	N / A
Total on type	1432.0

1.6 Aircraft information



Image 2 – File photo of aircraft

Airframe:

Type	Cessna Skyhawk 172	
Serial No.	172 - 67780	
Manufacture	Cessna A/C Cooperation	
Year of manufacture	1969	
Total airframe hours (at time of accident)	6035.0	
Last annual inspection (hours & date)	6018.5	2 November 2020
Hours since annual inspection	16.5	
Authority to Fly (issue date)	18 November 2020	
Authority to Fly (expiry date)	17 November 2021	
C of R (issue date) present owner	23 February 2007	
Operating categories	a,b,c,d,e,f	

Engine:

Type	Textron Lycoming 0-320-H2HD
Serial No.	RL-1112-76T
Hours since New	3724.7
Hours since Overhaul	1328.5

Propeller:

Type	McCauley 1C160/DTM755M1
Serial No.	ACK44554A
Hours since New	1189.0
Hours since Overhaul	146.5

1.7 Meteorological Information

- 1.7.1 The investigator did obtained a weather report for the area and conformation from farm owner.

1.8 Aids to navigation

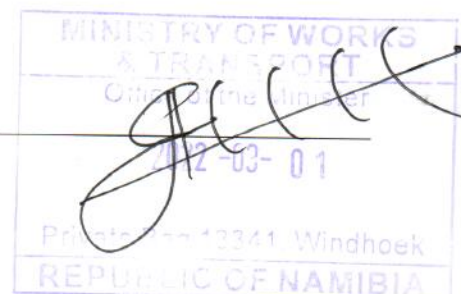
- 1.8.1 The aircraft was equipped with standard navigation equipment and a panel mounted GPS

1.9 Communications

- 1.9.1 The aircraft was equipped with standard communication equipment for this type.

1.10 Aerodrome information

- 1.10.1 Public gravel road in farming area.



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 were they required by the regulation for this type.
- 1.11.2 The GPS model did not make provision for data downloads.

1.12 Wreckage and impact information

- 1.12.1 Location of Accident next to the district road.

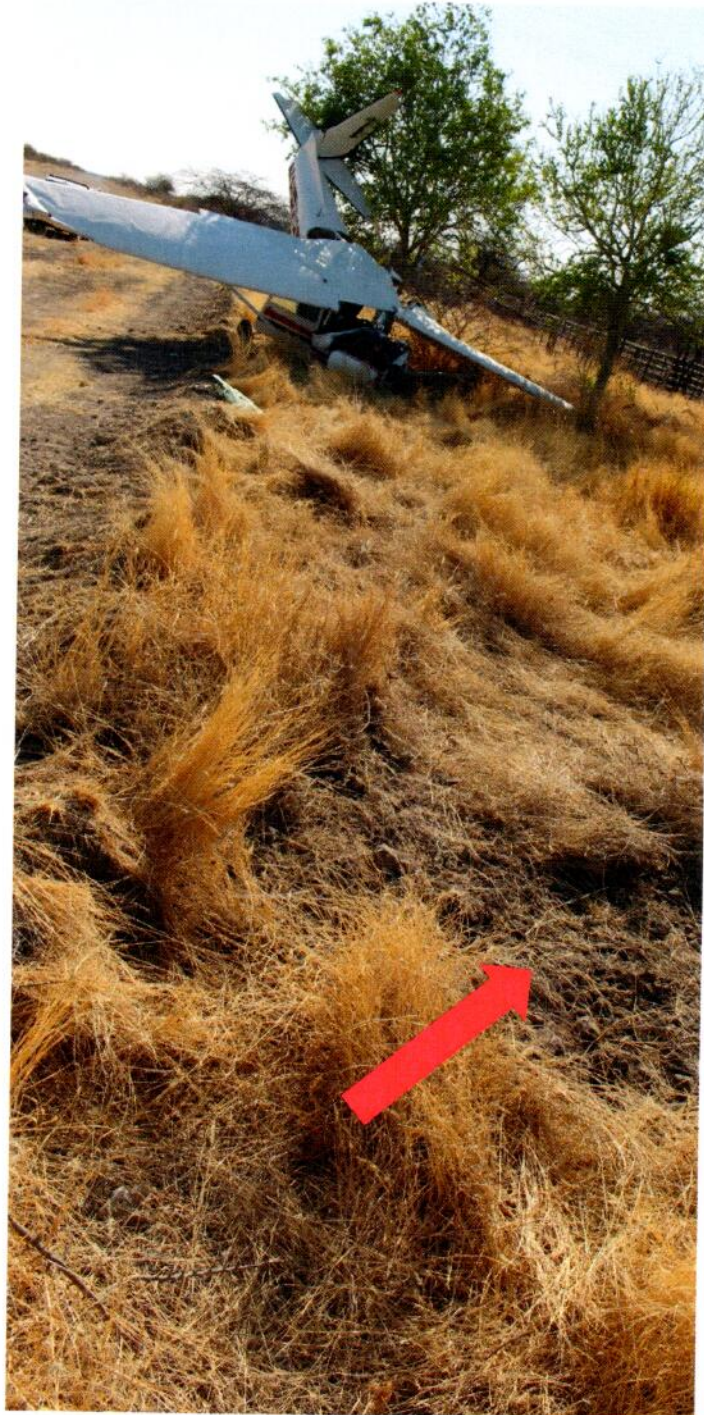


Image 3: Point of impact at a very steep angle nose down and a reversed jump backwards into tree.



Image 4: Crushed nose section of the aircraft.

1.13 Medical and pathological information

1.13.1 An autopsy, toxicological and pathological investigation were carried out.

1.13.2 No medical emergency was detected or observed during the autopsy.

1.14 Fire

1.14.1 There was no pre or post-impact fire.

1.15 Survival aspects

1.15.1 The accident was deemed not to be survivable due to the downward impact forces on the aircraft.

1.15.2 After the accident, an Emergency Locator Transmitter send the crash signal on 406 MHz and the ANS in Namibia was alerted to a possible crash south of the Etosha pans in the northern part of Namibia.



Image 5: Downward forces crushed the nose section backwards into the cockpit area, severely injuring the pilot

1.16 Tests and research

- 1.16.1 No further test and research was carried out.
- 1.16.2 No technical assistance from AMO s was required by the DAAII into the accident.

1.17 Organizational and management information

- 1.17.1 The aircraft was owned by a private person and utilized by the farmer for private use.
- 1.17.2 The aircraft was signed out and authorized to fly by the AMO nr 066.

1.18 Additional Information

- 1.18.1 None.

1.19 Useful or effective investigation techniques

- 1.19.1 None.

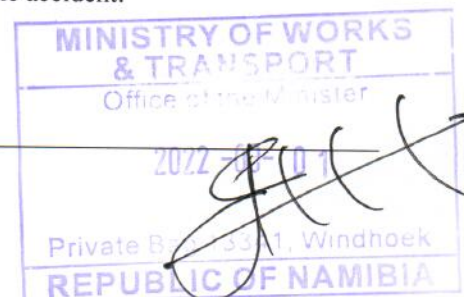
2. ANALYSIS

- 2.1 On 08th Oct 2021 at around 16:00 UTC, a Cessna Skyhawk (C172) with Registration No. V5-MPL took off from the Farm Zuckhof West using the district gravel road for a short ferry flight to the other farm of the pilot 20 km to the east.
- 2.2 The pilot was the holder of a private pilot license with a valid medical certificate at the time of the accident and had a total of 2006, 9 flying hours.
- 2.3 The pilot shortly after getting airborne, tried to avoid a power line crossing the road, but lost control of the aircraft and it hit the ground at a 70 degree angle next to the road side.
- 2.4 The aircraft was air worthy and the aircraft logbooks were also found in the aircraft.
- 2.5 The pilot sustained serious injuries during the crash and was transferred to Otjiwarongo hospital by Ambulance for treatment. However he succumbed to death at 21H45 that night.
- 2.6 It was concluded that the engine was working and the propeller was spinning when the aircraft impacted the ground.

2. CONCLUSION

2.1 Findings

- 2.1.1 The pilot was the holder of a private pilot license, validated by the NCAA as per regulation. . The pilot s medical certificate was valid at the time of the accident.
- 2.1.2 The pilot did talk with his farm workers on the road as to where fires are still burning and was stressed up about the situation.
- 2.1.3 The power line direct in front of the take-off flight path of the aircraft contributed to the accident.
- 2.1.4 The pilot lost control executing an evasive manoeuvre during the take-off and crashed into the ground next to the gravel road.
- 2.1.5 The Cessna Skyhawk 172 was certified for VFR flight conditions.
- 2.1.6 The aircraft's flight folio and maintenance records did not reveal any recent problem issues or occurrences since the last MPI and was serviceable at the time of the accident.



2.1.7 The pilot filed no flight plan for the short ferry flight back to his other farm 20 km east of the take off point. The pilot did use the district gravel road for the landing and take-off under the presumption that the fire situation merit it as he was helping other farmers with fire teams as to the where about of more fires. NAMCAR s make provision for pilots to make use of public roads in case of an emergency.

2.2 Probable cause

2.2.1 Loss of control during take-off.

3 SAFETY RECOMMENDATIONS

3.1 None

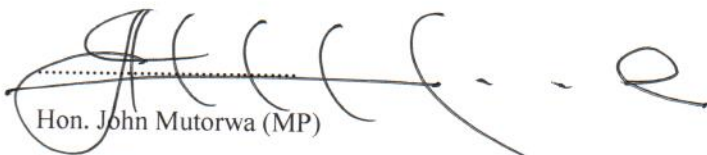


Date: 18 FEBRUARY 2022

O.V. Plichta

Investigator-in-charge

Released by:



Hon. John Mutorwa (MP)

MINISTER: MINISTRY OF WORKS AND TRANSPORT

Date: 1 MARCH 2022

