

PRELIMINARY ACCIDENT REPORT

Accident and Incident Investigations Division

Accident
- Preliminary Report -
AIID Ref No: CA18/2/3/10533



Figure 1: The aircraft after the accident. (Source: Operator)

Description:

On Sunday afternoon, 1 December 2024, a pilot on-board a Cubby aircraft with registration ZU-DWY took off on a scenic flight from Highway Airfield in the Western Cape province with the intention to land back at the same aerodrome. This was the second flight of the day. Earlier, the pilot had flown with a passenger before making a full-stop landing; the passenger disembarked from the aircraft afterwards. The pilot then taxied to the beginning of Runway 31 and took off again, solo. According to the witness (who was the passenger on the first flight) the take-off was uneventful. The eyewitness observed the aircraft as it made a turn to

the left and, then right, positioning for landing on Runway 13. Whilst turning to the right, the aircraft descended in a vertical nose-down attitude and crashed on the ground. The eyewitness notified the people at the airfield who rushed to the accident site in Forest View Farm. The pilot suffered serious injuries and was taken to the hospital. The aircraft was found rested in a vertical attitude; it was substantially damaged.

Occurrence Details

Reference Number : CA18/2/3/10533
Occurrence Category : Accident (Category 2)
Type of Operation : Private (Part 94)
Name of Operator : M I Geurini
Aircraft Registration : ZU-DWY
Aircraft Make and Model : Cubby
Nationality : South African
Registration Marks : ZU-DWY
Place : Highway Airfield (also known as Knysna Airfield)
Date and Time : 1 December 2024 at 1330Z
Injuries : 1 + 0
Damage : Substantial

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.

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.

Investigation Process

The Accident and Incident Investigations Division (AIID) of the South African Civil Aviation Authority (SACAA) was notified of the occurrence involving a Cubby which occurred at Highway Airfield in the Western Cape province on 1 December 2024 at 1330Z. The occurrence was classified as an accident according to the CAR 2011 Part 12 and the International Civil Aviation Organisation (ICAO) STD Annex 13 definitions.

The AIID has appointed an investigator-in-charge who was dispatched to the accident site to commence with the full investigation. Notifications were sent to the State of Registry and Operator in accordance with the CAR 2011 Part 12 and the ICAO Annex 13 Chapter 4. The States did not appoint an accredited representative and/or advisor. The AIID will lead the investigation and issue the final report of this accident in accordance with the CAR 2011 Part 12 and the ICAO Annex 13.

The information contained in this preliminary report is derived from the information gathered during the on-going investigation into the occurrence. Later, an interim or final report may contain altered information in case new evidence is found during the on-going investigation that requires changes to the information depicted in this report.

The AIID reports are made available to the public at:

<https://www.caa.co.za/industry-information/accidents-and-incidents/>

Notes:

- Whenever the following words are mentioned in this report, they shall mean the following:*
Accident — this investigated accident
Aircraft — the Cubby involved in this accident
Investigation — the investigation into the circumstances of this accident
Pilot — the pilot involved in this accident
Report — this accident report
- Photos and figures used in this report were taken from various sources and may have been adjusted from the original for the sole purpose of improving clarity of the report. Modifications to images used in this*

report were limited to cropping, magnification, file compression; or enhancement of colour, brightness, contrast; or addition of text boxes, arrows, or lines.

Disclaimer

This report is produced without prejudice to the rights of the AIID, which are reserved.

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Abbreviation	Description
°	Degrees
°C	Degrees Celsius
ACCID	Accident
AIID	Accident and Incident Investigations Division
AP	Approved Person
ATF	Authority-to-Fly
C of R	Certificate of Registration
CAR	Civil Aviation Regulations
CRS	Certificate of Release to Service
CVR	Cockpit Voice Recorder
FDR	Flight Data Recorder
ft	Feet
GPS	Global Positioning System
hPa	Hectopascal
kt	Knots
m	Metres
MHz	Megahertz
nm	Nautical Miles
NPL	National Pilot Licence
QNH	Altitude Above Mean Sea Level
RWY	Runway
SACAA	South African Civil Aviation Authority
SAWS	South African Weather Service
VMC	Visual Meteorological Conditions
Z	Zulu (Term for Universal Co-ordinated Time - Zero Hours Greenwich)

1. FACTUAL INFORMATION

1.1. History of Flight

- 1.1.1 On Sunday afternoon, 1 December 2024, a pilot on-board a Cubby aircraft with registration ZU-DWY took off on a scenic flight from Highway Airfield Runway 31 with the intention to land back at the same aerodrome, located in the Western Cape province. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 94 of the Civil Aviation Regulations (CAR) 2011 as amended.
- 1.1.2 The pilot initially flew with the passenger on-board who became airsick. Thereafter, the pilot landed the aircraft, and the passenger disembarked. The flight lasted approximately 10 minutes. The pilot then taxied the aircraft to the beginning of Runway 31 and took off again, solo this time. He flew low-level on Runway 31. According to the eyewitness (who was the passenger during the previous flight), she observed the take-off as uneventful. The eyewitness was standing in front of the hangar when the aircraft took off.
- 1.1.3 The eyewitness stated that she observed the aircraft as it made a turn to the left, and then the right, positioning for landing on Runway 13. Whilst turning to the right, the aircraft descended in a vertical nose-down attitude and crashed on the ground. The eyewitness notified the people at the airfield who rushed to the accident site in Forest View Farm. The pilot suffered serious injuries and was taken to the hospital. The aircraft was found rested in a vertical attitude; it was substantially damaged.
- 1.1.4 The accident occurred 0.95 nautical miles (nm) from Highway Airfield at Global Positioning System (GPS) co-ordinates determined to be 33° 57' 55" South 22° 58' 10" East, at an elevation of 790 feet (ft).



Figure 2: The yellow pin indicates the accident site. (Source: Google Earth)

1.2 Injuries to Persons

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

Note: Other means people on the ground.

1.2.1 The pilot sustained serious injuries and was admitted to the hospital.

1.3 Damage to Aircraft

1.3.1 The aircraft sustained substantial damage during impact with the ground.



Figure 3: The aircraft in its resting position after the accident.

1.4 Other Damage

1.4.1 None.

1.5 Personnel Information

Nationality	South African	Gender	Male	Age	50
Licence Type	National Pilot Licence (NPL)				
Licence Valid	Yes	Type Endorsed	Yes		
Ratings	None				
Medical Expiry Date	31 January 2027				
Restrictions	None				
Previous Accidents	None				

Note: Previous accidents refer to past accidents the pilot was involved in, when relevant to this accident.

Flying Experience:

Total Hours	286.5
Total Past 24 Hours	TBD
Total Past 7 Days	TBD
Total Past 90 Days	TBD
Total on Type Past 90 Days	TBD
Total on Type	TBD

Note: The above information was obtained from the pilot's last flight renewal on file at the SACAA as the pilot is still at the hospital at the time of compiling this report.

1.5.1 The pilot was initially issued a National Pilot Licence (NPL) on 31 March 2006. His licence was renewed on 20 February 2023 with an expiry date of 8 February 2025.

1.5.2 The pilot was issued a Class 4 aviation medical certificate on 9 January 2024 with an expiry date of 31 January 2027 with no medical restrictions.

1.6 Aircraft Information

1.6.1 Aircraft Description (Source: Pilot's Operating Handbook [POH])

The aircraft type is a tandem configuration cockpit arrangement. It has a steel tube construction that is covered with fabric with a high configuration. It has a fixed tricycle landing gear and is equipped with a Volkswagen 2.1L engine fitted with a three-bladed propeller. When the aircraft's empty weight and balance are calculated, the centre of gravity (CG) is positioned in front of the wing leading edge. The wing leading edge is the datum from which all arm measurements are taken.

Airframe:

Manufacturer/Model	Cubby Wings/Cubby	
Serial Number	AK 0505	
Year of Manufacturer	TBD	
Total Airframe Hours (At Time of Accident)	544.5	
Last Inspection (Date & Hours)	30 September 2024	199.9
Hours Since Last Inspection	13.8	
CRS Issue Date	30 September 2024	
ATF (Issue Date & Expiry Date)	4 November 2024	31 October 2025
C of R (Issue Date) (Present Owner)	24 May 2021	
Type of Fuel Used	Mogas	
Operating Category	Part 94	
Previous Accidents	None	

Note: Previous accidents refer to past accidents the aircraft was involved in, when relevant to this accident.

Engine:

Manufacturer/Model	Volkswagen 2.1
Serial Number	SFH1090102
Hours Since New	199.9
Hours Since Overhaul	TBO not yet reached

Propeller:

Manufacturer/Model	De Necker / P Prop 70" x 47P
Serial Number	N3511-FEG6
Hours Since New	64.7
Hours Since Overhaul	TBO not yet reached

1.6.2 The aircraft's 50-hour inspection (last inspection) was conducted on 30 September 2024 at 199.9 hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 29 September 2025 or at 249.9 hours, whichever comes first. The Approved Person (AP) who maintained the aircraft was authorised to conduct maintenance on this type of aircraft.

1.7 Meteorological Information

1.7.1 To be included in the final report.

1.8 Aids to Navigation

1.8.1 The aircraft was equipped with standard navigational equipment as approved by the Regulator. There were no records indicating that the navigational equipment was unserviceable prior to the flight.

1.9 Communication

1.9.1 The aircraft was equipped with a standard communication system as approved by the Regulator. There were no recorded defects with the communication system prior to the flight.

1.10 Aerodrome Information

1.10.1 The accident occurred approximately 0.95 nm from Highway Airfield.

Aerodrome Location	Highway Airfield Western Cape Province
Aerodrome Status	Unlicensed
Aerodrome GPS coordinates	33°56'57.6" South, 022°58'10.3" East
Aerodrome Elevation	790 ft
Runway Headings	13 / 31
Dimensions of Runway Used	600m
Heading of Runway Used	RWY 31
Surface of Runway Used	Grass
Approach Facilities	None
Radio Frequency	124.4 MHz

1.11 Flight Recorders

1.11.1 The aircraft was neither equipped with a flight data recorder (FDR) or a cockpit voice recorder (CVR), nor was it required by regulation to be fitted to the aircraft type.

1.12 Wreckage and Impact Information

1.12.1 The aircraft impacted the ground in a nose-down attitude; it faced east. It remained in a nose-down attitude after the crash. One of the propeller blades was bent.



Figure 4: The aircraft's impact point.



Figure 5: The eyewitness position.

1.13 Medical and Pathological Information

1.13.1 To be discussed in the final report.

1.14 Fire

1.14.1 There was no evidence of a pre- or post-impact fire.

1.15 Survival Aspects

1.15.1 The accident was considered survivable as the cockpit design was tandem (two-seater on the front and back) with the pilot seated at the back seat. Moreover, the rear cockpit area sustained minimal damage.

1.16 Tests and Research

1.16.1 To be discussed in the final report.

1.17 Organisational and Management Information

1.17.1 This was a private flight that was conducted under the provisions of Part 94 of the CAR 2011 as amended.

1.17.2 The aircraft was registered to the present owner on 24 May 2021 and was operated by M I Geurini.

1.17.3 The aircraft was maintained by an AP who issued the aircraft's Authority-to-Fly (ATF) on 4 November 2024 with an expiry date of 31 October 2025.

1.18 Additional Information

1.18.1 To be discussed in the final report.

1.19 Useful or Effective Investigation Techniques

1.19.1 To be discussed in the final report.

2 FINDINGS

2.1 General

From the available evidence, the following preliminary findings were made with respect to this accident. These shall not be read as apportioning blame or liability to any organisation or individual.

To serve the objective of this investigation, the following sections are included in the conclusions heading:

- **Findings** — are statements of all significant conditions, events, or circumstances in this accident. The findings are significant steps in this accident sequence, but they are not always causal or indicate deficiencies.

2.2 Findings

2.2.1 The pilot was initially issued a National Pilot Licence (NPL) on 31 March 2006. The licence was reissued on 20 February 2023 with an expiry date of 8 February 2025. The aircraft type was endorsed on the pilot's licence and logbook.

2.2.2 The pilot was issued a Class 4 aviation medical certificate on 9 January 2024 with an expiry date of 31 January 2027 with no medical restrictions.

2.2.3 The 50-hour inspection of the aircraft (last annual inspection) was conducted on 30 September 2024 at 199.9 hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 29 September 2025 or at 249.9 hours, whichever comes first.

2.2.4 The AP was authorised to conduct maintenance on this type of aircraft.

2.2.5 The engine was recovered to the AP for further inspection after the accident.

3 ON-GOING INVESTIGATION

3.1.1 The AIID investigation is on-going and the investigator will be investigating other aspects of this occurrence which may or may not have safety implications.

4 SAFETY RECOMMENDATIONS

4.1 General

The safety recommendations listed in this report are proposed according to paragraph 6.8 of Annex 13 to the Convention on International Civil Aviation and are based on the conclusions listed in heading 3 of this report. The AIID expects that all safety issues identified by the investigation are addressed by the receiving States and organisations.

4.2 Safety Recommendation/s

4.2.1 None.

5 APPENDICES

5.1 None.

This report is issued by:

**Accident and Incident Investigations Division
South African Civil Aviation Authority
Republic of South Africa**