

PRELIMINARY ACCIDENT REPORT

Accident and Incident Investigations Division

Accident
- Preliminary Report -
AIID Ref No: CA18/2/3/9864



Figure 1: The Bush-baby as found at the accident site. (Photo courtesy of the pilot)

Description:

The aircraft nosed over during landing on Runway 04 at Pietersgift private airstrip in Plot 40 near Klerksdorp in the Northwest Province. The aircraft was substantially damaged and the pilot reported no injuries.

DESCRIPTION OF ACCIDENT

Reference Number : CA18/2/3/9864
Name of Owner/Operator : P.E. Potgieter
Manufacturer : Kit planes for Africa
Model : Bush-baby
Nationality : South African
Registration Marks : ZU-BEA
Place : Small holding plot 49 near Klerksdorp
Date : 30 January 2020
Time : 1700Z

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 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.***

Any person who has information concerning this accident should contact the AIID on AIIDinbox@caa.co.za

Investigations process:

The Accident and Incident Investigations Division (AIID) of the SACAA was informed about an Aircraft Accident, involving a Bush-baby which occurred at Small holding at Plot 49 near Klerksdorp on 30 January 2020. The occurrence was notified to the AIID Investigator on call on 6 February 2020.

The AIID appointed an Investigator-in-charge. Notifications were sent to the State of Registry, State of Operator, State of Design and State of Manufacturer which is South Africa. The AIID will lead the investigation and issue the Final Report.

The information contained in this Preliminary Report is derived from the factual information gathered during the ongoing investigation into the Occurrence. Later Interim reports or the Final Report may contain altered information in case new evidence appears during the ongoing investigation that requires changes to the information depicted in this Report.

*The AIID Reports are made publicly available at:
<http://www.caa.co.za/Pages/Accidents%20and%20Incidents/Aircraft-accident-reports.aspx>*

Notes:

- Whenever the following words are mentioned in this Report, they shall mean the following:*
 - Accident- this investigated accident;*
 - Aircraft- the Bush-baby 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 obtained from different sources and may be adjusted from the original for the sole purpose of improving the clarity of the Report. Modifications to images used in this Report are limited to cropping, magnification, file compression, or enhancement of colour, brightness, contrast, or the addition of text boxes, arrows or lines.*
- Disclaimer:**

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

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1. FACTUAL INFORMATION

1.1. History of Flight

- 1.1.1 On 30 January 2020 at approximately 1600Z the pilot took off from Plot 40 (Pietersgift private airstrip) near Klerksdorp on a local flight with the intention to return to the same airstrip. The pilot reported that on his return during landing on Runway 04, the left axle broke off and the aircraft nosed over before stopping and coming to rest in an inverted position.
- 1.1.2 The aircraft was substantially damaged and the pilot reported serious injuries.
- 1.1.3 The accident occurred at Pietersgift private airstrip in clear weather conditions and at sundown on Plot 49 near Klerksdorp at a GPS determined to be S 26°50'48.0" E 026° 34'24.9" at an elevation of 4414 feet (ft).

1.2. Injuries to Persons

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

1.3. Damage to Aircraft

- 1.3.1 The aircraft was substantially damaged.

1.4. Other Damage

- 1.4.1 None

1.5. Personnel Information

Nationality	South African	Gender	Male	Age	59
Licence Type	National Pilot Licence				
Licence valid	Yes	Type Endorsed	Yes		
Ratings	None				
Medical Expiry Date	31 July 2020				
Restrictions	corrective lenses				
Previous Accidents	None				

Flying Experience:

Total Hours	198.8
Total Past 90 Days	10.4
Total on Type Past 90 Days	10.4
Total on Type	0

1.6. Aircraft Information

Airframe:

Type	Bush-baby	
Serial Number	039	
Manufacturer	Kit planes for Africa	
Date of Manufacture	1997	
Total Airframe Hours (At time of Accident)	582.5	
Last annual inspection (Date & Hours)	6 August 2019	576.6
Hours since Last MPI	5.9	
ATF (Issue Date)	8 August 2019	
ATF (Expiry date)	31 August 2020	
C of R (Issue Date) (Present owner)	12 May 2017	
Operating Categories	Part 24	

Engine:

Type	Rotax 912 ULS
Serial Number	4428828
Hours since New	188
Hours since Overhaul	TBO not yet reached

Propeller:

Type	Unknown
Serial Number	Unknown
Hours since New	188
Hours since Overhaul	TBO Not yet reached

1.6.1 At the time of releasing this preliminary report, the owner/operator had not submitted the propeller logbook and information with regards to the type and serial number.

1.7 Meteorological Information

1.7.1 Weather information as extracted from the pilot questionnaire.

Wind direction	360°	Wind speed	3kts	Visibility	10km
Temperature	32°C	Cloud cover	Sky clear	Cloud base	None
Dew point	Unknown	QNH	Unknown		

1.8. Aids to Navigation

1.8.1 The aircraft was equipped with standard navigational equipment as approved by the Regulator for the aircraft type. No defects were recorded prior to the flight.

1.9 Communication

1.9.1 The aircraft was equipped with standard communication equipment as approved by the Regulator for the aircraft type. No defects were no recorded prior to the flight.

1.10 Aerodrome Information

1.10.1 The accident occurred at Pietersgift private airstrip on Plot 49 near Klerksdorp and on Runway 04.

Aerodrome Location	Republic of South Africa – Klerksdorp Airport
Aerodrome Co-ordinates	GPS S 26°52'11.49" E 026° 43'12.09"
Aerodrome Elevation	4473 feet (AMSL)
Runway Designations	13/15 and 05/23
Runway Dimensions	1000mx 34m 972mx 39m
Runway Used	N/A
Runway Surface	Tar
Approach Facilities	None

1.11 Flight Recorders

1.11.1 The aircraft was neither equipped with a flight data recorder (FDR) nor a cockpit voice recorder (CVR), and none were required to be fitted to this aircraft by the Regulation.

1.12 Wreckage and Impact Information

1.12.1 The left axle broke off during landing on Runway 04 resulting on the aircraft nosing over. The propeller struck the ground and one of the blades broke off before the aircraft nosing over. The tail gear assembly was bent, the tail section was buckled, and the vertical fin was bent as well as the he roof of the aircraft.



Figure 2: The Bush-baby after coming to rest

1.12.2 Figure 3 and 4 below shows some evidence of fatigue crack and rust on the failed axle.



Figure 3 and 4: Close view of the failed axle

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 there was no damage to the cockpit area which could have caused injuries to the pilot.

1.16 Tests and Research

1.16.1 To be discussed in the final report.

1.17 Organizational and Management Information

1.17.1 This was a private flight, the aircraft was privately owned and operated as required by CAR 2011, Part 94.

1.17.2 The aircraft was maintained by an approved person (AP) with number 240 and was approved by Aero Club of South Africa.

1.18 Additional Information

1.18.1 None.

1.19 Useful or Effective Investigation Techniques

1.19.1 To be discussed in the final report.

2. Findings

2.1 General

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

- 2.1.1 The pilot had been re-issued with a National pilot license (NPL) following his last competency check on 12 October 2019 with correct aircraft type endorsed on it and with an expiry date of 11 October 2021. His medical certificate had been issued on 21 July 2017 with an expiry date of 31 July 2020.
- 2.1.2 The left axle broke off during landing on Runway 04 at Pietersgift private airstrip. Post-accident investigation photo showed evidence of a fatigue crack and rust on the majority surface of the axle.
- 2.1.3 The flight was conducted in clear weather conditions at sundown and in visual flight rules (VFR) conditions.
- 2.1.4 The aircraft had been issued with a Certificate of Registration (C of R) on the 12 May 2017.
- 2.1.5 The aircraft had been issued with an Authority to Fly (ATF) on 08 August 2019 with an expiry date of 31 August 2020.
- 2.1.6 The aircraft had been issued with a certificate of release to service (CRS) on 06 August 2019 at 576.6 hours with an expiry date of 06 August 2020 or at 626.6 hours whichever occurs first.

3. On-going Investigation

- 3.1 The SACAA investigation is on-going and we will be looking into other aspects of this occurrence which may or may not have safety implications.