

AIRCRAFT INCIDENT REPORT AND EXECUTIVE SUMMARY

				Reference:	CA18/3/2/1010	
Aircraft Registration	ZU-ZDL	Date of Incident	25 February 2014		Time of Incident	0657Z
Type of Aircraft	Sling		Type of Operation	Training		
Pilot-in-command Licence Type	Student	Age	43	Licence Valid	Yes	
Pilot-in-command Flying Experience	Total Flying Hours	38.11		Hours on Type	38.11	
Last point of departure	Virginia Aerodrome (FAVG)					
Next point of intended landing	Pietermaritzburg Aerodrome (FAPM)					
Location of the Incident site with reference to easily defined geographical points (GPS readings if possible)						
Runway 16 at Pietermaritzburg Aerodrome						
Meteorological Information	Surface Wind: 230 at 03 knots. Visibility: Good. Temperature: 21C Cloud base: 6500 feet.					
Number of people on board	1 + 0	No. of people injured	0	No. of people killed	0	
Synopsis	<p>The student pilot, who was the owner of the aircraft, took off from FAVG on an illegal cross-country training flight to FAPM. The pilot has transgressed the South African Civil Aviation Technical Standards 61.02.5 as stated on paragraph 1.18.1 of this report. During the landing on runway 16 at FAPM the student pilot landed the plane hard, the nose wheel collapsed and the propeller struck the ground.</p> <p>The student pilot sustained no injuries.</p> <p>The aircraft sustained damage to the propeller and the nose wheel broke off.</p>					
Probable Cause						
<p>The student pilot landed the aircraft hard and the nose wheel collapsed.</p> <p>Contributory factor: Incorrect landing technique.</p>						
IARC Date			Release Date			

AIRCRAFT INCIDENT REPORT

Name of Owner : MC Naught AD & Anderson LJ Partnership
Name of Operator : Private
Manufacturer : The Airplane Factory (Pty.) Ltd.
Model : 2011
Nationality : South African
Registration Marks : ZU-ZDL
Place : Pietermaritzburg Aerodrome runway 06
Date : 25 February 2014
Time : 0657Z

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 (1997) this report was compiled in the interest of the promotion of aviation safety and the reduction of the risk of aviation Incidents or incidents and **not to establish legal liability.***

Disclaimer:

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

1. FACTUAL INFORMATION

1.1 History of Flight

- 1.1.1 On 25 February 2014, the student pilot, who was also the owner of the aircraft, stated that he took off from FAVG on a solo cross-country training flight to FAPM. During the landing at FAPM on runway 16 the aircraft landed hard, the nose wheel collapsed and the propeller struck the ground.

1.2 Injuries to Persons

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

1.3 Damage to Aircraft

1.3.1 The aircraft sustained damage to the propeller and the nose wheel.

1.4 Other Damage

1.4.1 None.

1.5 Personnel Information

Nationality	South African	Gender	Male	Age	43
Licence Number	0272413584	Licence Type	Student		
Licence valid	Yes	Type Endorsed	Yes		
Ratings	None				
Medical Expiry Date	30 April 2014				
Restrictions	None				
Previous Incidents	None				

Flying Experience:

Total Hours	38.11
Total Past 90 Days	4.29
Total on Type Past 90 Days	4.29
Total on Type	38.11

1.6 Aircraft Information

Airframe:

Type	Sling	
Serial Number	034	
Manufacturer	The Airplane Factory (PTY) LTD	
Year of Manufacture	2011	
Total Airframe Hours (At time of Incident)	334.48	
Last Annual Inspection (Date & Hours)	21 August 2013	264.63
Hours since Last Annual Inspection	69.85	
Authority to fly (Issue Date)	22 August 2013	
C of R (Issue Date) (Present owner)	25 August 2011	
Operating Categories	Private	

Engine:

Type	Rotax 912UL
Serial Number	6778521
Hours since New	334.48
Hours since Overhaul	TBO not yet reached

Propeller:

Type	Warpdrive 3 Blade 72+
Serial Number	T13475
Hours since New	334.48
Hours since Overhaul	TBO not yet reached

1.7 Meteorological Information

1.7.1 Weather information as obtained from the pilot's questionnaires.

Wind direction	230	Wind speed	03 knots	Visibility	Good
Temperature	21C	Cloud cover	6500 feet	Cloud base	6500 feet
Dew point	unknown				

1.8 Aids to Navigation

1.8.1 The aircraft was equipped with standard navigation instruments as per the manufacturer's design. None was reported unserviceable prior to or during the Incident.

1.9 Communications.

1.9.1 The aircraft was equipped with standard communication equipment as required by the regulator. There were no recorded defects to this equipment prior to the flight.

1.10 Aerodrome Information

Aerodrome Location	FAPM	
Aerodrome Co-ordinates	S29° 38'48.44", E030° 23'51.98"	
Aerodrome Elevation	2423 feet	
Runway Designations	16	34
Runway Dimensions	1537 x 30	1537 x 30
Runway Used	16	
Runway Surface	Asphalt	
Approach Facilities	PAPI	

1.11 Flight Recorders

1.11.1 The aircraft was not equipped with a flight data recorder or cockpit voice recorder. Neither was required by regulations to be fitted to this aircraft type.

1.12 Wreckage and Impact Information

1.12.1 During the landing the student pilot landed the aircraft hard, the nose wheel collapsed.



Figure 1: The picture of the aircraft after the incident

1.13 Medical and Pathological Information

1.13.1 None

1.14 Fire

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

1.15 Survival Aspects

1.15.1 The occupant was properly restrained by safety harnesses and due to the relatively low impact force, the Incident was considered survivable.

1.16 Tests and Research

1.16.1 The report from the AMO (aircraft maintenance organisation) revealed that the nose gear was damaged during a bad landing.

1.17 Organizational and Management Information

1.17.1 This was an unauthorised private flight.

1.18 Additional Information

1.18.1. Privileges and limitations of SPL

The following information has been extracted from SA-CATS and CARS

61.02.5 (1) The holder of a valid SPL may only fly solo as prescribed in Document SA-CATS

61 for the purpose of training for the applicable pilot licence .

(a) in the type of aircraft in which he or she is undergoing training as endorsed in his or her logbook;

(b) after a prior written authorisation thereto for a flight, or a sequence of flights, as prescribed in the relevant curriculum and all such flights are under the supervision of the holder of an appropriate and valid flight instructor rating, or a person appointed by the Chief Flying Instructor, provided that such person is the holder of at least a PPL.

(c) without carrying any passengers;

(d) on a flight other than an international flight; and

(e) in VMC by day.

(2) Notwithstanding the provision of sub-regulation (1)(e), a student undergoing the integrated

training may exercise the privileges of his or her SPL also .

(a) in VMC by night, if he or she is the holder of a valid night rating; and

(b) under IFR, if he or she is the holder of a valid instrument rating.

1.18.2 Attached is the report from the AMO.

RECORD OF MAJOR DEFECTS AND DAMAGE SUSTAINED

Note this section is to be completed after every major incident where repairs are carried out to the primary structure of the aircraft.

Date of Incident	Total Airframe Time	Total Airframe Cycles
25/03/2014	334.4	—

Brief description of defect or damage sustained

NOSE GEAR DAMAGED ON BAR LANDING AS WELL AS PROP BRIDE DAMAGE.

NEW LGEAR INSTALLED - MOUNTS INSPECTED.

NEW PROP INSTALLED + INSPECTION DONE. IN ACCORDANCE WITH LOGAL REQUIREMENTS.

I hereby certify that the information as recorded above is correct in every respect to the best of my knowledge.

Name J. D. HOSKINS Signature [Signature]

AME Number AMO certification stamp  Date 07/03/2014



RECORD OF MAJOR DEFECTS AND DAMAGE SUSTAINED

Date of Incident	Total Airframe Time	Total Airframe Cycles

Brief description of defect or damage sustained

[illegible]

I hereby certify that the information as recorded above is correct in every respect to the best of my knowledge.

Name Signature

AME Number AMO certification stamp Date

1.19 Useful or Effective Investigation Techniques

1.19.1 None.

2. ANALYSIS

- 2.1 On 25 February 2014 the student pilot took off from FAVG (Virginia Aerodrome) to FAPM (Pietermaritzburg Aerodrome). During the landing at FAPM the student pilot landed the aircraft hard and the nose wheel collapsed.
- 2.2 The investigator is of the opinion that during landing, the student pilot flared too high and the student pushed the aircraft forward which caused the aircraft to touch the ground hard on the nose wheel and as a result the nose wheel collapsed. The inexperience of the student could have contributed to the fact that an incorrect landing technique was used.
- 2.3 According to available maintenance records, the aircraft was properly maintained. The Annual Inspection was conducted as per regulations. No defect or malfunction was observed that could have contributed to or caused the incident.
- 2.4 The available information revealed that fine weather conditions prevailed at the time of the incident. Therefore it is concluded that weather was not a contributory factor.

3. CONCLUSION

3.1 Findings

- 3.1.1 The student pilot had a valid student pilot's licence and was properly rated for the aircraft type.
- 3.1.2 The student pilot had a valid medical certificate which expired on 30 April 2014.
- 3.1.3 The student pilot who was also the owner of the aircraft had transgressed the regulation as in paragraph 1.18.1 of this report by flying the aircraft without authorization.

3.1.4 According to available records the aircraft was properly maintained. The Annual Inspection was conducted as per regulations.

3.1.5 Weather was not a contributory factor to the Incident.

3.2 Probable Cause/s

3.2.1 The student pilot landed the aircraft hard and the nose wheel broke off.

3.3 Contributory factor:

3.3.1 Incorrect landing technique.

4. SAFETY RECOMMENDATIONS

4.1 None

5. APPENDICES

5.1 None