



AIRCRAFT ACCIDENT REPORT AND EXECUTIVE SUMMARY

				Reference:	CA18/2/3/8285	
Aircraft Registration	ZS-OZF	Date of Accident	15 April 2007		Time of Accident	0530Z
Type of Aircraft	Cessna U206C		Type of Operation	Private		
Pilot-in-command Licence Type	Private (Validation)		Age	39	Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	676		Hours on Type	5,9	
Last point of departure	Barberton Aerodrome (FABN)					
Next point of intended landing	Barberton Aerodrome (FABN)					
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)						
Runway 35 at Barberton Aerodrome. GPS coordinates: S25°42'52.2' E030°58'22'						
Meteorological Information	Surface wind: Calm; Visibility: CAVOK; Temperature: 14°C					
Number of people on board	1 + 1	No. of people injured	0	No. of people killed	0	
Synopsis	<p>The pilot, accompanied by a passenger, departed from Barberton aerodrome on a local private flight. According to the pilot, he returned to the aerodrome after a flight of approximately 30 minutes for a full-stop landing on runway 35. Full flaps were selected prior to touchdown, and he recalled his speed to be approximately 75 mph. The round-out resulted in a higher-than-normal nose-up attitude, and on touchdown the aircraft bounced. Following a second bounce, the nose wheel separated from the aircraft. The aircraft nosed over before it came to rest in an inverted attitude on the runway.</p> <p>Both occupants escaped without injuries. The aircraft sustained damage to the propeller, left wing and empennage, and the nose wheel broke off.</p> <p>The last MPI (Mandatory Periodic Inspection) carried out on the aircraft prior to the accident was certified on 7 December 2006 at 7 023,6 airframe hours. The aeroplane had been flown for 37,6 hours since then.</p>					
Probable Cause						
<p>The pilot had limited experience on the aircraft type and stalled the aircraft during the flare, resulting in a hard landing, which caused the aeroplane to bounce. As a result, the nose wheel separated and the aircraft nosed over.</p>						
IARC Date	23 October 2007		Release Date			

AIRCRAFT ACCIDENT REPORT

Name of Owner/Operator : Dromadair CC
Manufacturer : Cessna Aircraft Corporation
Model : U206C
Nationality : RSA
Registration Marks : ZS-OZF
Place : Barberton Aerodrome
Date : 15 April 2007
Time : 0530Z

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 accidents or incidents and **not to establish legal liability.***

Disclaimer

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

1. FACTUAL INFORMATION

1.1 History of Flight

1.1.1 The pilot, accompanied by a passenger, departed from Barberton aerodrome on a local private flight. According to the pilot, he returned to the aerodrome after a flight of approximately 30 minutes for a full-stop landing on runway 35. Full flaps were selected prior to touchdown, and he recalled his speed to be approximately 75 mph. The round-out resulted in a higher-than-normal nose-up attitude, and on touchdown the aircraft bounced. Following a second bounce, the nose wheel separated from the aircraft. The aircraft nosed over before it came to rest in an inverted attitude on the runway.

1.2 Injuries to Persons

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

1.3 Damage to Aircraft

1.3.1 The aircraft sustained damage to the propeller, left wing, right-hand main wheel, and empennage and nose wheel.

1.4 Other Damage

1.4.1 None.

1.5 Personnel Information

Nationality	Italian	Gender	Male	Age	39
Licence Number	*****	Licence Type	Private		
Licence valid	Yes	Type Endorsed	Yes		
Ratings	None				
Medical Expiry Date	9 July 2007 (class 2)				
Restrictions	None				
Previous Accidents	Unknown				

Flying Experience:

Total Hours	676
Total Past 90 Days	15,6
Total on Type Past 90 Days	5,9
Total on Type	5,9

1.6 Aircraft Information

Airframe

Type	Cessna U206C	
Serial Number	U206-01160	
Manufacturer	Cessna	
Year of Manufacture	1968	
Total Airframe Hours (at time of accident)	7 061,2	
Last MPI (Date & Hours)	7 December 2006	7 023,6 hours
Hours since Last MPI	37,6	
C of A (Issue Date)	18 June 2003	
C of R (Issue Date) (Present Owner)	15 July 2005	
Operating Categories	Standard	

Engine

Type	Continental-10-520FUFB
Serial Number	830481
Hours since New	Unknown
Hours since Overhaul	394,9

Propeller

Type	McCauley D3A34C4V4C
Serial Number	920521
Hours since New	7 023,6
Hours since Overhaul	622,6

1.7 Meteorological Information

Weather information as obtained from the pilot's questionnaire:

Wind direction	Calm	Visibility	CAVOK	Temperature	14°C
Cloud Cover	None	Cloud base	None	Dew point	Unknown

1.8 Aids to Navigation

1.8.1 The aircraft was equipped with standard navigational equipment certified for this type of aircraft and this was reported serviceable at the time of the accident.

1.9 Communications

1.9.1 The pilot broadcasted his intentions on the VHF frequency 124.8 MHz prior to landing at Barberton aerodrome.

1.9.2 The aircraft was equipped with standard communication equipment for this type of aircraft and this was reported serviceable at the time of the accident.

1.10 Aerodrome Information

Aerodrome Location	Barberton Aerodrome	
Aerodrome Co-ordinates	S25°42'52.2' E030°58'22'	
Aerodrome Elevation	2 300 feet	
Runway Designations	17/35	
Runway Dimensions	1 000m X 15m	
Runway Used	35	
Runway Surface	Grass	
Approach Facilities	None	

1.11 Flight Recorders

1.11.1 The aircraft was not fitted with a flight data recorder, nor was this required in terms of the Civil Aviation Regulations.

1.12 Wreckage and Impact Information

1.12.1 During the landing, the aircraft bounced twice and came to rest in an inverted attitude.



Figure1. The damaged aircraft following the recovery.

1.13 Medical and Pathological Information

1.13.1 The pilot was the holder of a valid aviation class 1 medical certificate with no restrictions.

1.14 Fire

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

1.15 Survival Aspects

1.15.1 The accident was considered survivable due to the fact that the pilot and passenger were properly restrained by the aircraft's safety harness.

1.16 Tests and Research

1.16.1 None was considered necessary.

1.17 Organisational and Management Information

1.17.1 This was a private flight.

1.17.2 The CAA conducted an audit on the AMO on 13 October 2005 and follow-up inspection on 19 October 2006. No major findings were raised.

1.18 Additional Information

1.18.1 None.

1.19 Useful or Effective Investigation Techniques

1.19.1 None considered necessary.

2. ANALYSIS

2.1 The pilot flared the aircraft too much. During touchdown, at an indicated airspeed of 75 mph, the aircraft bounced and the pilot failed to recover.

3. CONCLUSION

3.1 Finding

3.1.1 The pilot held a valid private pilot's licence from the United Kingdom and was in possession of a South African validation.

3.1.2 According to the available records, the aircraft was properly maintained.

3.1.3 Weather did not have any bearing on this accident.

3.1.4 The pilot had full flaps extended for landing with an indicated airspeed of 75 mph. However, the POH recommended 80-90 mph.

3.2 Probable Cause/s

The pilot had limited experience on the aircraft type and stalled the aircraft during the flare, resulting in a hard landing, which caused the aeroplane to bounce. As a result, the nose wheel separated and the aircraft nosed over.

4. SAFETY RECOMMENDATIONS

4.1 None

5. APPENDICES

5.1 None

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Revised by the Office of the Executive Manager: Accident and Incident Investigation
September 2008