



AIRCRAFT ACCIDENT REPORT AND EXECUTIVE SUMMARY

				Reference:	CA18/2/3/8908	
Aircraft Registration	ZS-NLP	Date of Accident	14 February 2011		Time of Accident	0440Z
Type of Aircraft	Air Tractor AT 401		Type of Operation	Agricultural		
Pilot-in-command Licence Type		CPL	Age	60	Licence Valid	Yes
Pilot-in-command Flying Experience		Total Flying Hours	7946,3		Hours on Type	24,7
Last point of departure		Kataza private airstrip - KZN				
Next point of intended landing		Kataza private airstrip - KZN				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)						
Kataza private airstrip – KZN, at the following GPS: S28° 30.18' E031° 169,39'						
Meteorological Information		No weather info				
Number of people on board	1 + 0	No. of people injured	0	No. of people killed	0	
Synopsis						
<p>The pilot took off from Kataza private airstrip for aerial crop-spraying. The pilot stated that after he conducted a crop-spraying detail on the farm, he landed back at Kataza private airstrip at an indicated airspeed (IAS) of approximately 70 to 80 miles per hour (mph) on the runway, which is 800 meters long. During the landing, the aircraft bounced on a stretch of wet runway. The pilot attempted to recover by selecting full throttle, but the engine did not respond due to the rapid movement of the throttle lever.</p> <p>The pilot sustained no injuries.</p> <p>The aircraft subsequently slid down the down slope of the runway and ground-looped with the tail wheel still locked in position for landing. The aircraft sustained damage to the tail section.</p>						
Probable Cause						
<p>The pilot induced an engine failure by rapidly moving the throttle. He lost control on landing Contributing factor: Wet runway.</p>						
IARC Date				Release Date		
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AIRCRAFT ACCIDENT REPORT

Name of Owner : Van den Berg Lugbespuiting cc
Name of Operator : Rautenbach Aerial Spraying
Manufacturer : Air Tractor
Model : AT-401
Nationality : South African
Registration Marks : ZS-NLP
Place : Kataza private airstrip - KZN
Date : 14 February 2011
Time : 0440Z

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 stated that after he had conducted a crop-spraying detail on the farm, he approached Kataza private airstrip at an indicated airspeed (IAS) of approximately 70 to 80 miles per hour (mph) on a runway of 800meters long. During the landing the aircraft bounced on a stretch of wet runway. The pilot attempted to recover by selecting full throttle, but the engine did not respond due to the rapid movement of the throttle lever.

1.1.2 The aircraft subsequently slid down the down slope of the runway and ground-looped with the tail wheel still locked in position for landing.

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 substantial damage to the tail section.



Figure 1 indicate damage to the aircraft

1.12 Other Damage

1.4.1 None.

1.5 Personnel Information

Nationality	RSA	Gender	Male	Age	60
Licence Number	0272250580	Licence Type	CPL		
Licence valid	Yes	Type Endorsed	Yes		
Ratings	Night & Agricultural Pilot				
Medical Expiry Date	31 January 2012				
Restrictions	Corrective lenses				
Previous Accidents	Yes				

Note: After the landing, while parking the aircraft, the left wheel locked while the pilot was attempting to ease forward, the power pulled the nose downwards and the propeller struck the ground.

Flying Experience:

Total Hours	7946,3
Total Past 90 Days	40,2
Total on Type Past 90 Days	25,9
Total on Type	24.7

1.6 Aircraft Information

Airframe :

Type	AT3P	
Serial Number	401-0935	
Manufacturer	Air Tractor	
Year of Manufacture	1993	
Total Airframe Hours (At time of Accident)	4856.9	
Last MPI (Date & Hours)	31 January 2011	4849,60
Hours since Last MPI	7,3	
C of A (Issue Date)	16 February 2007	
C of R (Issue Date) (Present owner)	10 July 2009	
Operating Categories	Standard Part 137	

Engine :

Type	Pratt & Whitney R1340-AN-1
Serial Number	10233
Hours since New	976,9
Hours since Overhaul	TBO not yet reached

Propeller :

Type	Hamilton Standard 22D40/AG200-2
Serial Number	E7002
Hours since New	129,6
Hours since Overhaul	TBO not yet reached

1.7 Meteorological Information

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

Wind direction	Nil	Wind speed	calm	Visibility	CAVOK
Temperature	20 °C	Cloud cover	Nil	Cloud base	Nil
Dew point	Unknown				

1.8 Aids to Navigation

1.8.1 The aircraft was equipped with standard navigation equipment approved by the

regulator for the aircraft type. No defects were reported prior to the accident.

1.9 Communications.

1.9.1 The aircraft was equipped with VHF radio communication equipment approved by the regulator for the aircraft type. No defects were reported prior to the accident.

1.10 Aerodrome Information

1.10.1 The accident did not occur at or near the aerodrome. The accident occurred at the following GPS coordinates: S28° 30 18" E031° 169 39" in a grass runway private airstrip.

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 was it required by regulation to be fitted to this type of the aircraft.

1.12 Wreckage and Impact Information

1.12.1 The aircraft bounced on a wet runway, the engine failed while the pilot attempted to recover, and as a result the aircraft crashed.



Figure 2 Wreckage of the aircraft

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 pilot was properly restrained with the safety harnesses and due to the low impact forces associated with the accident, it was considered survivable.

1.16 Tests and Research

1.16.1 None.

1.17 Organizational and Management Information

1.17.1 This was an agricultural flight.

1.18 Additional Information

1.18.1 None.

1.19 Useful or Effective Investigation Techniques

1.19.1 None.

2. ANALYSIS

2.1 The pilot stated that after he conducted a crop-spraying detail on the farm, he approached at Kataza private airstrip at an indicated airspeed (IAS) of approximately 70 to 80 miles per hour (mph) on the runway that is 800meters long. During the landing the aircraft bounced on a wet runway. The pilot attempted to recover by selecting full throttle, but the engine did not respond due to the rapid movement of the throttle lever.

2.2 According to available maintenance records, the aircraft was properly maintained. The mandatory periodic inspection was conducted as per regulations. The aircraft did not reflect any defect or malfunction that could have contributed to or caused the accident.

3. CONCLUSION

3.1 Findings

3.1.1 The pilot had a valid medical certificate and was properly rated on the aircraft type.

3.1.2 According to the records from the South African Civil Aviation Authority the aircraft was properly maintained.

3.1.3 The aircraft had a valid certificate of airworthiness issued on the 16 February 2007.

3.1.4 Weather was not a contributory factor to the accident.

3.2 Probable Cause/s

3.2.1 The pilot induced an engine failure by applying a rapid movement on the throttle. He lost control on landing.

3.2.2 Contributing factor: Wet runway.

4. SAFETY RECOMMENDATIONS

4.1 None.

5. APPENDICES

5.1 None.

Compiled by:

Koketjo Babili
For: Director of Civil Aviation

Date:

Investigator-in-charge:

Date:

Co-Investigator:

Date: