



AIRCRAFT ACCIDENT REPORT AND EXECUTIVE SUMMARY

				Reference:	CA18/2/3/8284	
Aircraft Registration	ZS-RTA	Date of Accident	10 April 2007		Time of Accident	1345Z
Type of Aircraft	Robinson R22 Beta		Type of Operation	Training		
Pilot-in-command Licence Type		Commercial	Age	64	Licence Valid	Yes
Pilot-in-command Flying Experience		Total Flying Hours	18503.6		Hours on Type	2333.2
Last point of departure		FAVG (Virginia – Durban; KZN)				
Next point of intended landing		FAVG (Virginia – Durban; KZN)				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)						
La Mercy – North of Durban; KZN @ a GPS position of S29° 35.805" E031° 7.099" @ Elevation +- 230 ft AMSL						
Meteorological Information	According to the official weather report, fine weather conditions prevailed at the time and place of the accident.					
Number of people on board	1+1	No. of people injured	0	No. of people killed	2	
Synopsis						
<p>On 10 April 2007 the pilot, accompanied by a student pilot, took off during fine weather conditions for a training flight to practice auto-rotation landings. The flight was duly authorized.</p> <p>During the exercise the student pilot attempted the recovery process too late and the pilot failed to intervene in time. This resulted in the helicopter impacting with the terrain, at which time the tail boom was severed from the helicopter and the helicopter erupted in fire.</p> <p>The occupants sustained fatal injuries during the accident sequence.</p> <p>The pilot was correctly licensed to conduct the flight and held a valid restricted medical certificate as a commercial pilot.</p> <p>According to the available information, the aircraft was correctly maintained.</p>						
Probable Cause						
Controlled flight into terrain.						
IARC Date			Release Date			

AIRCRAFT ACCIDENT REPORT

Name of Owner/Operator : ORYX Trust / Starlite Aviation
Manufacturer : Robinson
Model : R22 Beta
Nationality : South Africa
Registration Marks : ZS-RTA
Place : La Mercy, KZN Province
Date : 10 April 2007
Time : 1345Z

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 interests 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 On 10 April 2007 at approximately 1300Z, the pilot, accompanied by a student pilot, took off from Virginia Aerodrome in the KZN Province, on a training flight in the La Mercy area north of Durban.
- 1.1.2 While they were busy with an auto-rotation exercise in the La Mercy area, the student pilot attempted the recovery process too late and the helicopter impacted with the terrain.
- 1.1.3 During the impact the helicopter erupted in fire and also sustained substantial damage, fatally injuring the occupants.

1.2 Injuries to Persons

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

1.3 Damage to Aircraft

1.3.1 In addition to the impact damage, the aircraft also sustained substantial fire damage after the impact and was destroyed during the accident sequence.

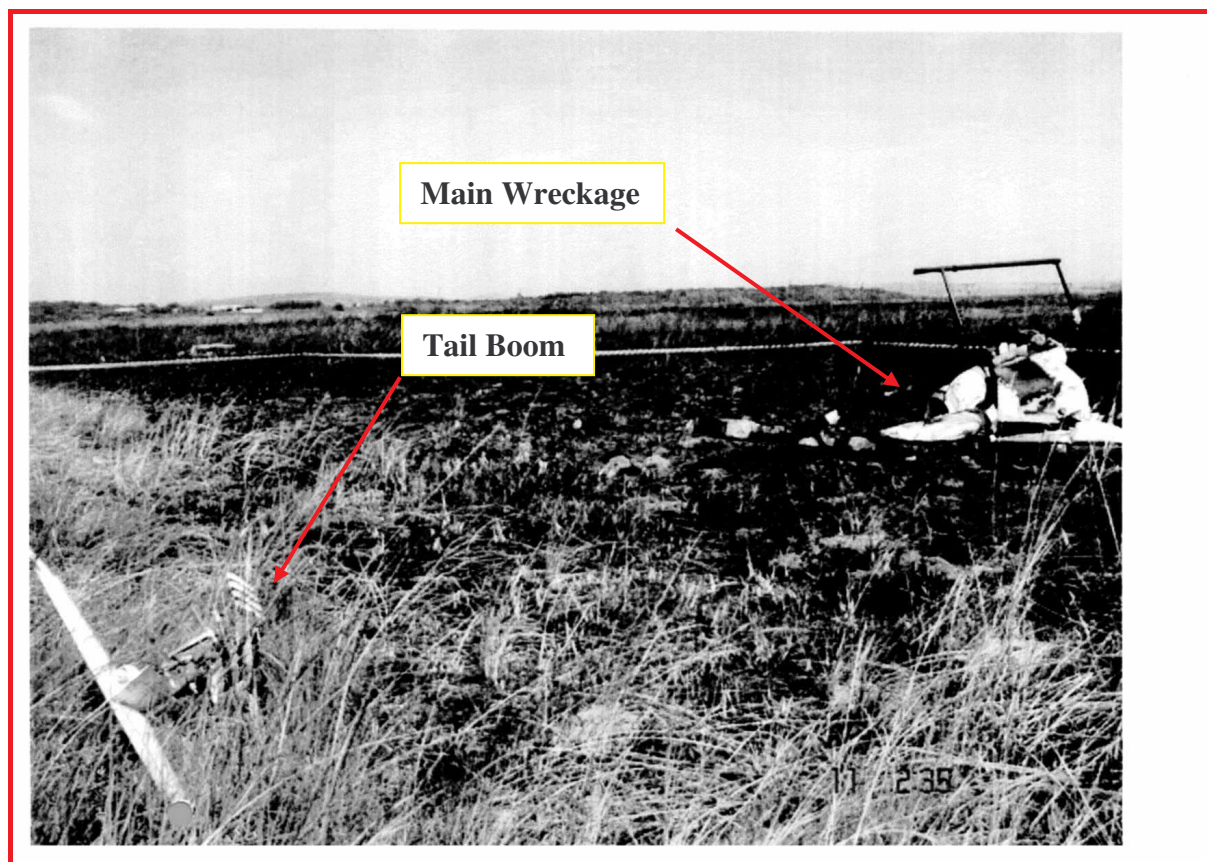


Figure 1: General view of the accident site.

1.4 Other Damage

1.4.1 Minor damage was caused to the immediate surrounding vegetation due to the post-impact fire.

1.5 Personnel Information

Pilot-in-Command

Nationality	South African				
Licence No		Gender	Male	Age	64
Licence valid	Yes	Type Endorsed	Yes		
Ratings	Instructor Gr 2 (28/03/2007 – 16/04/2010) Test Pilot Class 2 Undersling / Winch Night Cull				
Medical Expiry Date	31 March 2008				
Restrictions	Corrective lenses				
Previous Accidents	Nil				

Flying Experience:

Total Hours	18503.6
Total Past 90 Days	69.4
Total on Type Past 90 Days	43.7
Total on Type	2333.2

1.6 Aircraft Information

Airframe:

Type	R22 Beta
Serial #	3519
Manufacturer	Robinson
Year of Manufacture	2004
Total Airframe Hours @ last Mandatory Inspection (MPI)	2101.1
Hours since Last MPI	100.7
C of A (Issue date)	20 January 2007
C of R (Issue Date)	11 March 2004

Engine:

Type	Lycoming O 360 J2A
Ser #	L39348-36A
Hours since New	2101.0
Hours since Overhaul	N/A

1.7 Meteorological Information

- 1.7.1 According to the official weather report from the South African Weather Service, no official observations are available regarding the time and place of the accident. The most likely weather conditions at the place of the accident were as follows:

Wind direction	060° TN	Wind speed	09 Kts	Visibility
Temperature	23°C	Cloud cover	SCT @ 2000ft AGL	Good
Dew point	Unknown			

1.8 Aids to Navigation

- 1.8.1 The aircraft was equipped with standard navigational equipment for the aircraft type and there were no recorded defects prior or during the flight.

1.9 Communications

- 1.9.1 The aircraft was equipped with standard communication equipment for the aircraft type and there were no recorded defects prior or during the flight.

1.10 Aerodrome Information

Aerodrome Location	La Mercy
Aerodrome Co-ordinates	S29° 36.0' E031° 07.0'
Aerodrome Elevation	230 ft
Runway Designations	06/24
Runway Dimensions	3000 ft (914m)
Runway Used	Not applicable
Runway Surface	Grass

1.11 Flight Recorders

1.11.1 The aircraft was not equipped with any data recorders, nor was it a requirement by regulation.

1.12 Wreckage and Impact Information

1.12.1 It would appear that the student was doing an auto-rotation exercise, but initiated the recovery too late. The instructor failed to intervene in time and the tail of the helicopter impacted with the terrain.

1.12.2 After the tail impacted with the terrain, the tail boom severed from the helicopter, the helicopter nosed over forward and the force of the impact caused the helicopter to burst into flames.

1.13 Medical and Pathological Information

1.13.1 No autopsy reports were received at the time of compiling this report. Should the results of such reports warrant it, this report could be revised.

1.14 Fire

1.14.1 The aircraft was destroyed in the fire that followed the initial impact.

1.15 Survival Aspects

1.15.1 During the initial impact, the cockpit area was destroyed. In addition, the post-impact fire exacerbated the situation to the extent that this accident was not considered survivable.

1.16 Tests and Research

1.16.1 Not considered necessary.

1.17 Organisational and Management Information

1.17.1 The training flight was duly authorized.

1.18 Additional Information

1.18.1 There were no known witnesses to this accident.

1.18.2 According to the Authorization Sheet the purpose of the flight was to do auto-rotational exercises and recoveries.

1.19 Useful or Effective Investigation Techniques

1.19.1 None.

2. ANALYSIS

2.1 The pilot, accompanied by a student pilot, was conducting an auto-rotation exercise, but the student affected the recovery process too late. The pilot failed to intervene in time and the helicopter impacted with the terrain.

2.2 During the impact, the tail boom was severed from the helicopter and the helicopter erupted in fire. The occupants sustained fatal injuries during the accident sequence.

3. CONCLUSION

3.1 Findings

3.1.1 On 10 April 2007 the pilot, accompanied by a student pilot, took off from Virginia Aerodrome in the KZN Province, on a training flight in the La Mercy area north of Durban. While they were busy with an auto-rotation exercise, the student pilot attempted the recovery process too late and the helicopter impacted with the terrain.

3.1.2 During the impact, the tail boom was severed from the helicopter and the helicopter erupted in fire. The occupants sustained fatal injuries during the accident sequence.

3.1.3 The pilot was correctly licensed to conduct the flight and held a valid restricted medical certificate as a commercial pilot.

3.1.4 According to available information, the aircraft was correctly maintained.

3.1.5 Fine weather conditions prevailed at the time and place of the accident.

- 3.1.6 The aircraft was equipped with standard navigation and communication equipment for the aircraft type and there was no recorded telephony between the aircraft and any one else.
- 3.1.7 The aircraft was not equipped with any data recorders, nor was it a requirement by regulation.
- 3.1.8 It would appear that the student was doing an auto-rotation exercise, but initiated the recovery too late. The instructor failed to intervene in time and the tail of the helicopter impacted with the terrain.
- 3.1.9 No autopsy reports were received at the time of compiling this report. Should the results of such reports warrant it, this report could be revised.
- 3.1.10 The training flight was duly authorized.

3.2 Probable Cause/s

- 3.2.1 Controlled flight into terrain.

4. SAFETY RECOMMENDATIONS

- 4.1 None.

5. APPENDICES

- 5.1 None.

Report reviewed and amended by Advisory Safety Panel: 28 July 2009.

-END-