



Ref: 7820

SOUTH AFRICAN CIVIL AVIATION AUTHORITY**ACCIDENT REPORT – EXECUTIVE SUMMARY**

Aircraft Registration	ZS-RTX	Date of Accident	18 June 2004	Time of Accident	1215Z
Type of Aircraft	ROBINSON R22 BETA II		Type of Operation	Training	
Pilot-in-command Licence Type	Commercial	Age	23	Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	1 339.7		Hours on Type	361.8
Last point of departure	Panorama Aerodrome				
Next point of intended landing	Panorama Aerodrome				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)					
Panorama Aerodrome, Runway 30					
Meteorological Information	Fine: Wind – Calm, Temperature 20°C, Visibility >10km				
Number of people on board	2	No. of people injured	Nil	No. of people killed	Nil

Synopsis

The instructor pilot, accompanied by a student was engaged in a training flight in which tail rotor control failure emergency procedures were being practiced in the GFA at Panorama aerodrome utilising Runway 30.

Weather conditions were reported to be fine with calm wind conditions prevailing.

The intention of the exercise was to demonstrate to the student what could happen when the right anti-torque pedal should get stuck while established in hover flight and applying power (advancing collective pitch lever).

The recovery technique involved raising the collective while simultaneously rolling off the throttle and reducing main and tail rotor rpm to keep the helicopter aligned with the flight path. The intention was to land the aircraft following the exercise, however, during the attempted landing the left skid gear touched down first, positively, with slight lateral drift, which resulted in a rolling motion from which the instructor was unable to recover.

The main rotor blades impacted the ground first followed by the helicopter coming to rest on its left-hand side.

Once everything came to halt the engine was still running. The instructor then shut-down the engine by pulling the mixture lever, where after both occupants disembarked from the wreckage uninjured.

Probable Cause

The instructor pilot allowed the aircraft to touch down left skid first (slight amount of left cyclic), on an uneven grassy surface, aggravated by a strong reaction on the controls by the student, which the instructor was unable to overcome timeously, resulting in a dynamic rollover.