



Ref: 7689

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

Aircraft Registration	ZS-RBK	Date of Accident	7 July 2003	Time of Accident	1210Z
Type of Aircraft	ROBINSON R-22 BETA		Type of Operation	Training	
Pilot-in-command License Type	Commercial	Age	36	License Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	5 448.0	Hours on Type	259.4	
Last point of departure	Wonderboom Airport (FAWB)				
Next point of intended landing	Magalies Mountain Ridge				

Location of the accident site with reference to easily defined geographical points (GPS readings if possible)

Magalies Mountain Ridge near the Hartebeespoort Cable Way

Meteorological Information	Fine: Wind – 360°/10kts, Temperature +20°C, Visibility - Clear				
Number of people on board	1 + 1	No. of people injured	None	No. of people killed	None

Synopsis

The student pilot, accompanied by an instructor, was engaged in a mountain flying training flight. After being airborne for approximately 40 minutes, flying along the Magalies Mountain Ridge, assessing and discussing the wind direction they flew an approach in a westerly direction after a suitable landing area was identified. It was decided to overshoot and a second approach was flown, where upon the area was found unsuitable for landing due to very uneven/rocky terrain. At this stage the instructor took control of the aircraft and turned out right towards the north. During the turn the low rotor RPM warning sounded, and it was decided to execute a forced landing rather than to attempt to fly/manoeuvre the aircraft down the lee side of the ridge. The right front skid gear assembly impacted the rocky terrain first at a very slow forward speed, with the aircraft rolling-over onto its left.

Both occupants were properly secured by their safety harnesses and managed to escape with minor bruises. Being stranded on top of the mountain they managed to establish contact with the police air wing, which tasked a helicopter to uplift the two occupants and brought them to safety. The aircraft was substantially damaged during the collision.

Probable Cause

The pilot exceeded the performance envelope of the aircraft by operating it beyond its design limits, resulting in a condition where the power required exceeded the power available, resulting in a decay in main rotor RPM in close proximity to the ground, rendering ground impact inevitable.