Ref: 8047

SOUTH AFRICAN CIVIL AVIATION AUTHORITY

AIRCRAFT ACCIDENT REPORT AND EXECUTIVE SUMMARY

Aircraft Registration	**ZS-RVD**	**Date of Accident**	10 December 2005	**Time of Accident**	0500Z
Type of Aircraft	Schweizer 269C		**Type of Operation**	Private	
Pilot-in-command Licence Type	Commercial	**Age**	42	**Licence Valid**	Yes
Pilot-in-command Flying Experience	Total Flying Hours	6 790.1		Hours on Type	25.9
Last point of departure	Farm Kareefontein near Bloemfontein				
Next point of intended landing	Farm Kareefontein near Bloemfontein				

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

Farm Kareefontein (GPS position: South 28° 52.587' East 026° 32.686', elevation ± 4 780 feet AMSL)

Meteorological Information	Surface wind: 330°/10knots, Temperature: 20°C, Visibility: +10km				
Number of people on board	1 + 1	**No. of people injured**	0	**No. of people killed**	0

Synopsis

The pilot flew the helicopter on the morning of 10 December 2005 from Tempe Aerodrome to the game farm Kareefontein near Bloemfontein, after uplifting 62 litres of fuel. After landing on the farm the helicopter was shut down and he met up with the veterinarian. They then discussed the darting procedure, which would have entailed darting (inoculation) thirty-six antelope against splenitis.

At about 0425Z they got airborne and commenced with the darting procedure. As they were about to dart the 3rd animal, it started to run in the direction of some high ground. The pilot attempted to position the helicopter flying into wind, which was from the northwest at about 10 knots and at a height of approximately 20 feet above ground level. The animal suddenly stopped behind some small trees. The pilot decided to hover close by and as soon as the opportunity arise, the veterinarian can dart the animal. As they were about to enter into hover flight the pilot noted that the low rotor rpm warning light had illuminated. He then turned the helicopter around to the right and attempted to fly down slope/hill to regain rotor rpm. There was no other alternative due to high ground and vegetation surrounding the immediate area. The pilot turned the helicopter but it started to lose height, he immediately lowered the collective pitch lever slightly and increased the throttle in order to unload the rotor system and regain rotor rpm. The pilot attempted to fly out of this condition by using small collective pitch movements, but the left skid gear struck the ground hard. According to the pilot he then pulled the aircraft back into the air again by applying maximum collective pitch but at this stage the rotor rpm was severely depleted and the helicopter sank and impacted the ground approximately 5m further on. As he lowered the collective and throttle and the helicopter spun around to the left and rolled over. After activating the fuel shut-off lever and switching off the battery both occupants disembarked from the helicopter unassisted. The last MPI inspection that was certified on the helicopter prior to the accident was on 28 November 2005 at 196.6 airframe hours. Since the MPI a further 4.0 hours were flown.

Probable Cause

The pilot allowed the rotor rpm to decay and in an attempt to recover/regain rotor rpm he turned downwind, which aggravated the condition rendering ground impact inevitable.

IARC Date		Release Date	