



Ref: 7535

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

Aircraft Registration	ZS-RBZ	Date of Accident	29/7/2002	Time of Accident	0820Z
Type of Aircraft	ROBINSON R-22 BETA		Type of Operation	Game Capture/Counting	
Pilot-in-command License Type	Commercial	Age	30	License Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	3 423.8		Hours on Type	2 223.2
Last point of departure	Farm in the Alldays Area				
Next point of intended landing	Farm in the Alldays Area				

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

Farm in the Alldays Area

Meteorological Information	Fine: Wind - NE/Light & Variable, Temperature +20°C				
Number of people on board	1 + 1	No. of people injured	One	No. of people killed	None

Synopsis

The pilot, accompanied by a passenger, departed on a game counting flight after the aircraft was refueled, with both tanks indicating approximately ¾. According to the pilot the take-off was uneventful, and the aircraft went through transition and started climbing slowly. After flying straight and level for approximately 10 seconds the “Clutch Amber Caution Light” illuminated on the instrument panel. The pilot allowed 5 seconds and then pulled the clutch/start circuit breaker. A right turn was initiated as the pilot had identified a clear area where the aircraft could be landed to attend to the problem. On final approach for the landing zone they suddenly experienced a rapid rate of descent before initiating the flare to reduce forward airspeed.

The pilot opened the throttle to maximum and raised the collective but the aircraft continued to descend even with the collective against the maximum stop. The aircraft impacted the ground at even skid level, upright, at a substantial forward speed and skidded forward for some distance before colliding with an embankment, which caused the aircraft to roll over, landing on the right-hand side facing the same direction it was coming from. The lower cockpit/cabin area sustained extensive impact damage with the instrument panel landing on the pilot’s chest and the passenger suffering a broken leg. The pilot pulled the passenger from the wreckage after switching off the battery master switch. The passenger was submitted to hospital shortly after the event.

The pilot mentioned that he could not recall that the low rotor RPM instrument as well as aural warning had activated or sounded during the accident. The rate of descent (ROD) he experienced was something he had never experienced before and was similar to encountering a serious downdraught in turbulent air conditions.

Probable Cause

The pilot encountered a clutch amber caution light shortly after lift-off and decided to land back immediately, in order to attend to the problem. The landing zone elected consisted of an open piece of dry desert type of terrain. The probability that he encountered severe dust (brown out) on final approach could have resulted in a temporary loss of visual reference/clues to the ground, resulting in a hard landing, which caused the aircraft to skid forward for some distance where upon it collided with an embankment and rolled-over.

The pilot may have encountered a loss in translational lift shortly after lift off, and decided to execute a forced landing on an open piece of ground. This resulted in a substantial rate of descent (ROD), resulting in a hard landing, followed by a collision with an embankment and subsequent roll-over.