



Ref: 7458

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

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|---|--|------------------------------|--------------------------|-----------------------------|---------|
| Aircraft Registration | ZS-REH | Date of Accident | 1 February 2002 | Time of Accident | 1300Z |
| Type of Aircraft | ROBINSON R-22 BETA | | Type of Operation | Recurrent Training | |
| Pilot-in-command License Type | Commercial | Age | 27 | License Valid | Yes |
| Pilot-in-command Flying Experience | Total Flying Hours | 3 850.0 | | Hours on Type | 1 400.0 |
| Last point of departure | FAGM - Rand Airport (Germiston) | | | | |
| Next point of intended landing | FAGM | | | | |
| Location of the accident site with reference to easily defined geographical points (GPS readings if possible) | | | | | |
| FAGM | | | | | |
| Meteorological Information | Approaching thunderstorm, Wind - 350°/12kts, Temperature +25°C | | | | |
| Number of people on board | 2 + 0 | No. of people injured | None | No. of people killed | None |
| Synopsis | <p>An instructor pilot, accompanied by a private pilot was engaged in recurrent training (dual check ride) after the private pilot was on a three-month layoff period. The flight was mainly to consist of emergencies and applicable exercises, which included an auto-rotation from 500 feet above ground level from the downwind position (180° Auto-rotation with Power Recovery).</p> <p>According to the instructor the first part of the auto-rotation went well due to the fact that the turn rate was slow. As more bank was applied the rate of descent (R.O.D.) increased to what he described as an abnormally high rate of descent. He then realized that they should abort the maneuver and initiated the recovery with an early flare coming out of the turn. However the aircraft continued to descend at a high rate, with limited time available to recover. He opened the throttle and applied collective with slight flare all the way until the point of impact. The aircraft touched down at an indicated airspeed of approximately 30-35kts. On impact the main rotor blades severed the tail boom and the skid gear assembly collapsed. The aircraft remained upright and once it came to a halt both occupants disembarked uninjured.</p> | | | | |
| Probable Cause | | | | | |
| <p>With an approaching thunderstorm from the south (causing severe wind gust conditions) the instructor pilot continued with the auto-rotation in a westerly direction. He therefore did not compensate for the change in wind direction, which resulted in an abnormally high rate of descent with insufficient height available to recover.</p> | | | | | |