



Ref: 7548

SOUTH AFRICAN CIVIL AVIATION AUTHORITY

ACCIDENT REPORT – EXECUTIVE SUMMARY

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|--|--|------------------------------|--------------------------|-----------------------------|---------|
| Aircraft Registration | ZS-RCO | Date of Accident | 28/8/2002 | Time of Accident | 1300Z |
| Type of Aircraft | ROBINSON R-22 BETA | | Type of Operation | Private | |
| Pilot-in-command License Type | Commercial | Age | 43 | Licence Valid | Yes |
| Pilot-in-command Flying Experience | Total Flying Hours | 4 250.0 | | Hours on Type | 3 300.0 |
| Last point of departure | Kwandwe Nature Reserve (Grahamstown Area) | | | | |
| Next point of intended landing | Kwandwe Nature Reserve | | | | |
| Location of the accident site with reference to easily defined geographical points (GPS readings if possible) | | | | | |
| Kwandwe Nature Reserve | | | | | |
| Meteorological Information | Fine | | | | |
| Number of people on board | 1 + 1 | No. of people injured | None | No. of people killed | None |
| Synopsis | <p>According to an interview with the pilot he was engaged in a game capturing exercise for the majority of the day. After seizing capture for the day, the aircraft was refuelled to capacity from a 44 US gallon drum, where after he would have flown to a nearby game farm, where capturing duties would have commenced the following day.</p> <p>During the initial refuelling phase the pilot assisted but then left the operation to one of the assistants to complete. No fuel sample was taken prior to the flight, as the same drum was utilised earlier in the day to refuel the aircraft.</p> <p>The pilot was then approached by the reserve owner's son (8-years old), requesting a short pleasure flight over the reserve, prior to the relocation of the helicopter to a nearby game farm. The duration of the flight was approximately 12 minutes. During approach for the landing, at a height of approximately 50ft above ground level and at an indicated airspeed of approximately 20 knots the engine stuttered and failed.</p> <p>The pilot immediately lowered the collective and auto-rotated to the ground. On landing the aircraft skidded forward and collided with a cactus bush, causing it to rollover. Nobody was injured in the accident.</p> | | | | |
| Probable Cause | | | | | |
| The engine failed as result of contaminated fuel being allowed to enter the engine fuel system. | | | | | |
| Contributory Factor: | | | | | |
| Inadequate supervision during refuelling procedure, including sampling of fuel for grade and contamination prior to flight. Inadequate control over the storage and testing of the fuel during game capturing operations. The fuel is being transported to the different locations in drums, on the back of a light delivery vehicle or truck, standing upright, in rainy conditions as well as overnight, which creates an ideal environment for condensation and subsequent contamination. | | | | | |