



Ref: 7809

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

Aircraft Registration	ZS-HXA	Date of Accident	22 May 2004	Time of Accident	1100Z
Type of Aircraft	HUGHES 269C		Type of Operation	Private	
Pilot-in-command Licence Type	Airline Transport	Age	55	Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	17303		Hours on Type	370
Last point of departure	Impala Range Aerodrome near Humansdorp				
Next point of intended landing	Impala Range Aerodrome near Humansdorp				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)					
In close proximity of Paradise Beach farm, near Humansdorp.					
Meteorological Information	CAVOK, Temperature 23°C, wind 270°/ 5-10kts.				
Number of people on board	2 + 0	No. of people injured	0	No. of people killed	0
Synopsis	<p>The instructor reported that the helicopter was parked on the helipad and refueled. The owner who is also a pilot assured the instructor pilot that the fuel was tested for contamination before the helicopter was moved out of the hangar. They took off and the helicopter operated normal. They spent approximately 15 minutes executing some upper-airwork before returning to the Aerodrome for circuit exercises. After completion of the circuit exercises, they returned to Paradise Beach farm. About 10 km from the farm the engine misfired but continued to run smoothly. The same happened again at about 5km from the farm. The pilot commended to the owner/ pilot that it felt like a dirty spark plug. Shortly after that, the helicopter started to loose power and airspeed. The instructor then decided to carry out a roll on precautionary landing on a farm road next to a fence. Prior to touch down and at approximately 50-100 feet AGL, the engine stopped and this was indicative of the slight loss of rotor rpm.</p> <p>The helicopter touched down hard and skidded forward for about 5 meters and turned to the left through 160° and stopped. The aircrafts' main rotor blades severed the tail-boom section and the tail rotor blades were damaged as a result of the impact. The pilot then switched off the aircraft and both occupants vacated the helicopter uninjured.</p> <p>During the investigation after the accident, the engine was started inside the hangar and was running rough only when the rpm was increased. The fuel tank was drained and water sediment was found. Although the necessary precautions were taken during the refuelling process, it was still very likely that contamination could occur due to various reasons, and the most likely one being condensation.</p> <p>The last Mandatory Periodic Inspection prior to the accident was carried out on 11December 2003 at 696.0 airframe hours and the aircraft accumulated a further 14.0 hours since the last MPI.</p>				
Probable Cause					
Engine failure due to fuel contamination, which resulted in the pilot executing a precautionary landing.					