



Ref: 7505

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

<b>Aircraft Registration</b>	<b>ZS-HNE</b>	<b>Date of Accident</b>	21 May 2002	<b>Time of Accident</b>	1000Z
<b>Type of Aircraft</b>	HUGHES 369HS	<b>Type of Operation</b>	Game Counting		
<b>Pilot-in-command Licence Type</b>	Private - Helicopter	<b>Age</b>	53	<b>Licence Valid</b>	Yes
<b>Pilot-in-command Flying Experience</b>	Total Flying Hours	2388 on 01 May 2002	<b>Hours on Type</b>	531.7	
<b>Last point of departure</b>	Premier Game Park-Cullinan				
<b>Next point of intended landing</b>	Premier Game Park- Cullinan				

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

In bushy rocky terrain in game park

<b>Meteorological Information</b>	The weather was fine
-----------------------------------	----------------------

<b>Number of people on board</b>	1 + 3	<b>No. of people injured</b>	1	<b>No. of people killed</b>	3
----------------------------------	-------	------------------------------	---	-----------------------------	---

**Synopsis**

The pilot and a passenger (fuelling assistant) departed from his farm near Hammanskraal (S25° 22.427' E28°22.240) at approximately 0600Z for a 20-minute flight to Premier Mine Game Park at Cullinan for a game counting operation.

According to a statement received from the fuelling assistant who supplied the ground support and refueling services, the helicopter was fueled to capacity prior to departure from Hammanskraal. After landing at the lapa and fuelling point in the Game Park, the helicopter was shut down for approximately 30 minutes.

After a meeting with all the relevant people involved in the game count operation, the pilot with 3 passengers departed from the lapa for the initial count which took approximately 55 minutes. On returning the helicopter was shut down for approximately 20 minutes before they commenced the second count with 3 passengers on board.

The intention was to count the open areas of the farm and on returning to the lapa one of the passengers (this was his first helicopter flight) would be replaced by a more experienced person (fuel assistant) to count the more dense bush areas.

The fuel assistant could also recall that he asked the pilot whether he needed fuel whereby the pilot advised him that he still had sufficient fuel and that he would uplift fuel on the return flight.

After approximately one hour the fuel assistant heard the helicopter crash and on reaching the accident site the pilot who initially survived the accident said: "We were trailing smoke and the only escape route I had was over the top of the high ground. We lost power as we got over the top and I didn't have time to flare the helicopter".

According to the only surviving passenger they flew up and down the farm to count the game, when he heard the pilot say they must return to refuel the helicopter. As they reached the top of the high ground, the helicopter collided heavily on the rocks straight down. The exhaust gasses smelled very strange. He also stated that the helicopter caught alight on impact. His clothes were soaked in paraffin and were burning. He ran away and got rid of his clothes. He could also not recall any strange noises or hearing any warning signals.

**Probable Cause**

Although fuel starvation seems to have been the most probable cause of the accident, this could not be conclusively determined due to the lack of conclusive factual information available and teardown results of the engine. The cause of the accident therefore remains undetermined.