



EXECUTIVE SUMMARY - AIRCRAFT ACCIDENT REPORT

				Reference:	CA18/2/3/7702	
Aircraft Registration	ZS-RLY	Date of Accident	25 September 2003		Time of Accident	1315Z
Type of Aircraft	Robinson R22 Beta		Type of Operation		Game Darting	
Pilot-in-command Licence Type		Commercial	Age	38	Licence Valid	Yes
Pilot-in-command Flying Experience		Total Flying Hours	1 158.2		Hours on Type	754.3
Last point of departure		Farm Waterfall near Machadodorp, Mpumalanga				
Next point of intended landing		Farm Waterfall near Machadodorp, Mpumalanga				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)						
Farm Waterfall near Machadodorp						
Meteorological Information		Surface wind 020° at 10 kts, temperature 28°C, visibility good				
Number of people on board	1 + 1	No. of people injured	1 + 0	No. of people killed	0	
Synopsis						
<p>The pilot, accompanied by a passenger, took off from the farm on an intended game-darting operation.</p> <p>After take-off, they flew in a southerly direction along the mountain contour to the darting area, at a height of approximately 5 200 ft above mean sea level (AMSL). They then entered a gorge and approached the darting area. They were too high for landing, and the pilot initiated a descending turn in a clockwise direction. During the third turn, the helicopter suddenly started to spin in a clockwise direction. The pilot immediately reacted by applying full left yaw pedal and lowering the collective pitch lever, but the helicopter continued to spin uncontrollably, and impacted several trees before it fell to the ground in a nose-down attitude.</p> <p>The passenger was not injured in the accident, but the pilot fractured his hand. The helicopter was substantially damaged.</p> <p>The indications, as described by the pilot, are a loss of tail rotor thrust, which would require immediate entry into autorotation. The pilot stated that he applied left yaw pedal without any effect. According to the Pilot Operating Handbook, Section 3, Pages 3 – 5, the application of left pedal will not correct the yaw effect.</p> <p>The helicopter was examined following recovery to an approved maintenance facility and no evidence of pre-impact failures or mechanical malfunctions of the airframe were noted. The last mandatory periodic inspection (MPI) that was carried out on the helicopter prior to the accident was certified on 28 July 2003 at 606.9 airframe hours. Since the MPI, a further 92.6 hours were flown with the helicopter.</p> <p>The pilot was the holder of a valid commercial helicopter pilot licence and had the helicopter type endorsed in his logbook. He had a cull/livestock rating endorsed in his licence.</p>						
Probable Cause						
The pilot did not apply the corrective recovery technique following a loss of tail rotor thrust.						
IARC Date	27 March 2008		Release Date			