



Ref: 7893

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

Aircraft Registration	ZS-REH	Date of Accident	14 December 2004		Time of Accident	0500Z
Type of Aircraft	Robinson R22 Beta		Type of Operation		Training	
Pilot-in-command Licence Type		Student	Age	38	Licence Valid	Yes
Pilot-in-command Flying Experience		Total Flying Hours	54.8	Hours on Type	21.8	
Last point of departure		Rand Aerodrome (FAGM)				
Next point of intended landing		Rand Aerodrome (FAGM)				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)						
Main Helipad at Rand Aerodrome.						
Meteorological Information		CAVOK. Temperature: 16°C. Surface Wind: Light and variable				
Number of people on board		1 + 0	No. of people injured	0	No. of people killed	0
Synopsis						
<p>The student pilot stated that when on final approach from the General Flying Area to land on the helipad at Rand Aerodrome, he experienced a right yaw that he could not control, followed by a hard landing. The pilot was not injured and the aircraft's landing gear was bent during the hard landing.</p> <p>In the Pilot Operating Handbook (POH) LOSS OF TAIL ROTOR THRUST DURING HOVER states that:</p> <ol style="list-style-type: none">1. Failure is usually indicated by nose right yaw which cannot be corrected by applying left pedal.2. Immediately roll throttle off into overtravel spring and allow aircraft to settle.3. Raise collective just before touchdown to cushion landing. <p>The POH states that when entering the loss of tail rotor thrust during hover the above-mentioned procedure should be followed. The hard landing was a result of not adhering to the procedure as stipulated in the POH.</p> <p>The aircraft was type accepted in the Republic of South Africa.</p> <p>The Aviation Training Organization (ATO) was issued with valid Accreditation and Approval Certificate in terms of Part 141 of the Civil Aviation Regulations of 1997 which expires on 30 June 2005. The ATO was audited by the CAA during the last two years; the last audit was conducted on 01 July 2004.</p> <p>The last MPI was certified on 11 October 2004 at a total of 1472.3 airframe hours. The aircraft was operated for 22.3 hours since the last MPI was certified. The Aviation Maintenance Organisation was audited by the CAA during the last two years; the last audit was conducted on 25 October 2004.</p>						
Probable Cause						
<p>On final approach to land on the helipad, the aircraft experienced a sudden yaw to the right, which the pilot was unable to compensate for. This resulted into a hard landing.</p> <p>The contributory cause was attributed to the loss of tail rotor thrust during hover procedure which was not performed.</p>						