



CA18/2/3/7907

## SOUTH AFRICAN CIVIL AVIATION AUTHORITY

### ACCIDENT REPORT – EXECUTIVE SUMMARY

<b>Aircraft Registration</b>	<b>ZS-MNC</b>	<b>Date of Accident</b>	23 January 2005	<b>Time of Accident</b>	1440Z
<b>Type of Aircraft</b>	KING AIR C90		<b>Type of Operation</b>		Private
<b>Pilot-in-command License Type</b>		Commercial	<b>Age</b>	59	<b>License Valid</b> Yes
<b>Pilot-in-command Flying Experience</b>		Total Flying Hours	1113.0		Hours on Type 427.6
<b>Last point of departure</b>		Grahamstown Aerodrome (FAGT)			
<b>Next point of intended landing</b>		Virginia Aerodrome (FAVG)			
<b>Location of the accident site with reference to easily defined geographical points (GPS readings if possible)</b>					
33m to the left hand side of RWY 24 at Durban International Aerodrome.					
<b>Meteorological Information</b>		Surface Wind 230/8kt. Visibility: CAVOK. Temperature: 25°C.			
<b>Number of people on board</b>	1 + 4	<b>No. of people injured</b>	0	<b>No. of people killed</b>	0
<b>Synopsis</b>					
<p>According to the pilot, he filed an IFR flight plan from FAGT to FAVG and (Durban) FADN as alternate. The pilot mentioned that during the take off run at a speed of 75kt, the aircraft yawed to the left; he applied right rudder and aileron to keep the aircraft straight on runway and rotated at 95kt.</p> <p>At approximately 5 minutes out from FAGT the pilot contacted Cape Town East and was informed that an observer on the airfield had seen the left main wheel departed the aircraft soon after rotation.</p> <p>He then diverted to FADN and continued flying in order to burn off fuel. On arrival at FADN, the pilot flew three low level flights over the airfield in order to inspect the intended landing area. It was confirmed by the ATC that the left hand main wheel was missing. The pilot executed a landing with the undercarriage retracted. On touch down the aircraft skidded for about 150m left of Runway 24 before coming to a halt.</p> <p>No one was injured. After the accident the passengers were treated for shock at a nearby hospital.</p> <p>The aircraft landed on its lower fuselage area. The left hand main wheel failed and the propellers, engine nacelles, lower fuselage area, antennae and torque links were severely damaged.</p> <p>The last MPI was carried out on 23 May 2004 at a total airframe of 9854.3 hours and the aircraft had flown a further 95.4 hrs since the last MPI was certified.</p>					
<b>Probable Cause</b>					
<p>The aircraft landed with the wheels retracted due to that the left main wheel came off during the take off roll.</p> <p>Contributing factor: The investigation revealed that the bearing failed as a result of overheating and excessive wear which formed particles between the roller bearing and the raceways which resulted in bearing seizure.</p>					