



Ref: 0356

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

<b>Aircraft Registration</b>	<b>ZS-KRD</b>	<b>Date of incident</b>	14 October 2004	<b>Time of incident</b>	0300Z
<b>Type of Aircraft</b>	CESSNA 414		<b>Type of Operation</b>	International Flight	
<b>Pilot-in-command Licence Type</b>	Commercial	<b>Age</b>	40	<b>Licence Valid</b>	Yes
<b>Pilot-in-command Flying Experience</b>	Total Flying Hours	6450.0	Hours on Type	70.0	
<b>Last point of departure</b>	Virginia Aerodrome				
<b>Next point of intended landing</b>	Durban-International Aerodrome (FADN)				
<b>Location of the incident site with reference to easily defined geographical points (GPS readings if possible)</b>					
Runway 23 at FADN					
<b>Meteorological Information</b>	Wind: Calm, Visibility: Good, Temperature: 26°C, Clouds: 1/8 @ 10 000ft, Dew point: Nil.				
<b>Number of people on board</b>	1 + 0	<b>No. of people injured</b>	0	<b>No. of people killed</b>	0

**Synopsis**

The pilot was on an international flight to Maputo and had to via FADN for immigration and customs as well as collecting passengers. Upon landing at FADN and whilst on a landing roll, the aircraft started drifting to the right and the pilot elected to stop the aircraft and shut-down the engines on the runway.

The pilot stated that, during the landing roll he felt the aircraft not tracking correctly, he then elected to stop the aircraft on the runway (Runway 23) and reported to the tower (ATC-Air Traffic Controller) of his intention to shut-down the engines. The pilot was instructed to vacate the runway prior to shutting-down, and he did not do as instructed by the ATC as the aircraft was uncontrollable. After shut-down the right hand main gear collapsed. Inspection by the AMO revealed that both the right main gear actuator rod end and landing gear door push-pull rod end had failed.

The pilot sustained no injuries and damage to the aircraft was limited to the right hand main landing gear attachment bracket, the skin on out board right hand flap, the skin around the main fuel filter, the right hand main gear actuator ball-end, the right hand main landing gear door push rod, right landing light and flap..

The last Mandatory Periodical Inspection (MPI) was carried out on 21 July 2004 at 8085.0 flying hours. The aircraft accumulated a further 15.8 flying hours after the last MPI.

The operator had a valid Aircraft Operating Certificate (AOC) which was issued on 08 October 2003 with an expiry date of 24 October 2004.

Metallurgical analysis revealed that both rod ends showed signatures of only ductile failures which is a sign of external loading probably following a hard landing.

**Probable Cause**

The probable cause was attributed to an external load exerted to the undercarriage as a result of a hard landing.