



100-024-0184

SOUTH AFRICAN CIVIL AVIATION AUTHORITY

INCIDENT REPORT – EXECUTIVE SUMMARY

Date of Accident	3 November 2000	Time of Accident	0900 Z	
Aircraft Registration	ZS-KSU	Type of Aircraft	Cessna 425	
Pilot-in-command Licence Type	Airline Transport		Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	8839	Total Hours on Type	3720
Type of Operation	Private			
Last point of departure	Zimbabwe			
Next point of intended landing	Lanseria			

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

Lanseria

Meteorological Information	CAVOK				
Number of people on board	1+3	No. of people injured	Nil	No. of people killed	Nil

Synopsis

The pilot was accompanied by three passengers on a private flight from Zimbabwe to Lanseria and was on base leg for runway 06 Left at Lanseria aerodrome when the left-hand engine failed catastrophically causing an In-flight engine fire. The aircraft was successfully landed and the fire extinguished by Lanseria fire personnel.

The fire damage was limited to the engine and no injuries were sustained.

The engine was removed and dismantled at an approved maintenance facility on 6 November 2000.

External inspection of the engine revealed that the power turbine (free turbine) partially shed a number of it's blades which were subsequently expelled through the exhaust. One of the scavenge pump oil return lines was punctured in the process.

Further examination of the engine components revealed that one of the three planet gears in the first stage reduction gearbox had failed resulting in seizure of the gearbox.

Probable Cause

It is uncertain whether cavitation erosion was the primary cause for the seizure of the said sleeve bearing or whether it was simply a contributory factor.

It is possible that the bearing became dislodged from it's press-fitted position and started rotating with the shaft, causing bearing failure.