



Ref: 7967

SOUTH AFRICAN CIVIL AVIATION AUTHORITY

AIRCRAFT ACCIDENT REPORT AND EXECUTIVE SUMMARY

Aircraft Registration	ZS-CBJ	Date of Accident	31 May 2005	Time of Accident	1530Z
Type of Aircraft	Mooney M20C		Type of Operation	Private	
Pilot-in-command Licence Type	Private	Age	46	Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	377		Hours on Type	377
Last point of departure	Matsapa Aerodrome (Swaziland)				
Next point of intended landing	Lanseria Aerodrome (FALA)				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)					
Behind Swift Flite hanger at Lanseria					
Meteorological Information	The pilot reported light and variable weather conditions: Temperature 17°C and Visibility: CAVOK				
Number of people on board	1 + 0	No. of people injured	0	No. of people killed	0
Synopsis	<p>The pilot reported that he landed on Runway 06L and was cleared to park on the main apron to clear customs. He was given clearance to park along side the Skycare hanger. The pilot taxied the aircraft for approximately 10 minutes before reaching the parking area. The pilot stated that during the parking he increased the engine power and applied the left hand rudder input to position 180° to turn west of the hanger. During the process the nose landing gear collapsed and the propeller struck the ground. Damage was sustained on the propeller and the lower structure of the engine cowlings.</p> <p>AMO 119 which was responsible for the maintenance of the aircraft was audited in the last two years prior to the accident. The last audit prior to the accident was carried out on the 28 February 2005 and no major findings were identified. AMO 044 was audited in the last two years prior to the accident. The last audit prior to the accident was carried out on the 17 September 2004 and no major findings were identified.</p> <p>The last MPI was carried out on the 24 November 2004 at a total of 4676.9 airframe hours. The engine had a total of 4290.50 hours since new and 532.60 hours since overall. The propeller had accumulated a total of 3221.80 hours since new and 463.90 hours since overall. The aircraft flew a total of 44.1 airframe hours since the last MPI (mandatory periodic inspection) was carried out.</p> <p>The pilot stated that during the in order to park the aircraft he increased the engine power and applied left hand rudder input to execute a 180° turn to a position west of the hanger. Due to a minimum space in the vicinity (between the hanger and other aircraft) the pilot over steered the rudders and most probably caused the nose wheel to move on its side overloading the push pull controls, and resulted in the failure of the nose landing gear frame.</p>				
Probable Cause					
The most probable cause for the failure of the nose landing gear could be attributed to over steering of the nose wheel by the pilot during the execution of 180° turn. The contributing factor could be attributed to the confine space where the pilot was parking the aircraft.					
IARC Date		Release Date			