



Ref: 0351

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

Aircraft Registration	ZS-MJK	Date of incident	25 August 2004	Time of Accident	1000Z
Type of Aircraft	PIPER PA-34-200T		Type of Operation	Test Flight	
Pilot-in-command License Type	Commercial	Age	61	License Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	19207	Hours on Type	1188	
Last point of departure	Lanseria Aerodrome (FALA)				
Next point of intended landing	Lanseria Aerodrome (FALA)				
Location of the incident site with reference to easily defined geographical points (GPS readings if possible)					
Runway 06L at Lanseria Aerodrome (FALA)					
Meteorological Information	Fine weather conditions and some haze prevailed at the time of the accident. The wind was at 330/15 gusting and the temperature was +18°C. There was no cloud.				
Number of people on board	1+0	No. of people injured	0	No. of people killed	0
Synopsis	<p>The aircraft had not been flown for more than a year and the pilot was asked by the owner to carry out a test flight, following an MPI. During the take-off roll, the airspeed indicator needle jumped from an indication of zero to 140 knots. At that stage the aircraft had almost reached rotation speed and the pilot continued with the take-off. After take-off he joined the circuit for a full-stop landing.</p> <p>On the down-wind leg the pilot selected one notch of flaperons. However, the flaperons extended fully and would not retract again. The pilot stated that he also experienced power surges and large fluctuations in the indicated manifold pressures. In addition various instruments did not work, various circuit breakers popped out and no warning systems functioned. The pilot selected the landing gear to the down position but due to his attention being diverted by the problems already mentioned he failed to check whether the landing gear was down and locked.</p> <p>During the landing both propellers made contact with the runway as a result of the landing gear not being extended and the pilot initiated a go-around. He then extended the landing gear, using the emergency system and carry out an otherwise uneventful landing.</p> <p>The pilot was correctly licenced and type-rated on the aircraft to conduct the flight. He held a valid medical certificate, which expired on 26 November 2004 and was restricted to wear corrective lenses. He also held a test pilot rating, class 2 and a grade 2 instructors rating as well as an instrument rating.</p> <p>According to the pilot an unidentified electrical problem caused the series of problems described in this report. At the time of compiling this report the aircraft was still not flying and the reason for the above problem could still not be established. The advised that he is planning to have the aircraft completely rewired. There is no evidence available to show whether any procedures were followed to inhibit the engine for the extended period that it was inoperative.</p> <p>The Annual Currency Fee was paid on 26 June 2004. The last CAA audit at THE AMO was conducted on 8 September 2003. The last certified MPI was carried out on 30 May 2003 at 3252.4 Airframe hours, at which time all Service Bulletins and Airworthiness Directives have been complied with. The aircraft type was accepted in South Africa.</p>				
Probable Cause					
An unidentified electrical problem caused a series of failures. As a result of the above the pilot failed to observe that the landing gear did not extend using the normal system. During the landing the propellers made contact with the ground, but the pilot managed to do a go-around during which he extended the landing gear with the emergency system and then landed the aircraft without further event.					