



Ref: 7435

SOUTH AFRICAN CIVIL AVIATION AUTHORITY

ACCIDENT REPORT – EXECUTIVE SUMMARY

Aircraft Registration	ZS-ITA	Date of Accident	2 December 2001		Time of Accident	0950Z
Type of Aircraft	Beech A60 (Duke)		Type of Operation		Performance test flight	
Pilot-in-command Licence Type	Airline Transport	Age	54	Licence Valid	Yes	
Pilot-in-command Flying Experience	Total Flying Hours	12700		Hours on Type	25	
Last point of departure	Rand Aerodrome (FAGM)					
Next point of intended landing	Rand Aerodrome (FAGM)					
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)						
East of Fouchville at a position S26° 29.048' E027° 32.861'						
Meteorological Information	Surface wind: Light westerly, Temperature: 23°C, Visibility: CAVOK					
Number of people on board	2 + 0	No. of people injured	0	No. of people killed	0	
Synopsis	<p>Extensive repair/refurbishing work was carried out on the aircraft. As a requirement for the re-issue of its Certificate of Airworthiness the aircraft was subjected to a performance test flight. The right-hand engine was shut down and the propeller feathered. The left-hand engine power setting was increased to maximum continuous power, but the aircraft was unable to maintain altitude. The pilot attempted to trim the aircraft more accurately in an attempt to obtain a positive rate of climb but to no avail. Attempts were made to start the right-hand engine again, but to no avail. The aircraft was losing height, necessitating intervention by the crew and it was decided to execute a forced landing.</p> <p>The post-impact fire destroyed the aircraft, but the occupants escaped unharmed.</p> <p>The pilot was the holder of a valid pilot license and the aircraft type was endorsed on his license. Although his test pilot rating was approved it was not endorsed on his pilot's license.</p> <p>The Certificate of Airworthiness of the aircraft was not valid as the test flight was a requirement for the C of A inspection. However all the other maintenance and repair work was appropriately certified.</p>					
Probable Cause						
<p>The aircraft was unable to maintain altitude with only the left-hand engine operational after the right-hand engine was shut-down as required for the flight performance test. The pilot was unable to re-start the inoperative right-hand engine and it was impossible to determine the exact cause for the right-hand engine not to re-start. The aircraft descended until a forced landing was inevitable.</p> <p>A contributing factor to this accident was the pilot's choice to carry out the performance test flight over an area that was not suitable for such an operation.</p>						
IARC Date		Release Date				