



Ref: 7836

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

Aircraft Registration	ZS-OUT	Date of Accident	30 July 2004	Time of Accident	0635Z
Type of Aircraft	BEECH 200 (SERIAL NO BB-764)	Type of Operation	Domestic Charter Flight		
Pilot-in-command Licence Type	Commercial	Age	25	Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	1480.0	Hours on Type	880.0	
Last point of departure	Comores Aerodrome (FMCH)				
Next point of intended landing	Anjouan Aerodrome (FMCV)				
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)					
During climb after take-off from Moroni aerodrome (Comores)					
Meteorological Information	The pilot reported the weather fine with FEW cloud and thunderstorm activities en-route				
Number of people on board	2 + 0	No. of people injured	0	No. of people killed	0

Synopsis

On 30 July 2004 at 0625Z, the pilot and the co-pilot departed from Moroni Aerodrome (Comores) for a domestic charter flight to Anjouan.

After take-off from Runway 20, a left hand climbing turn was initiated to establish a direct track of 124° for (flight level) FL115 en-route to destination. The autopilot was engaged upon reaching FL100 and the heading and pre-select were selected. Upon reaching FL110 however, some clouds (FEW) were observed on track at approximately FL120 with some (CB) cumulus cloud developing to the South East of Moroni. FL135 was requested and the aircraft was cleared for FL135.

Approximately 20nm outbound of FMCH (Comores) at FL125 at an IAS of 160kt, the aircraft passed approximately 100ft to the left of the cumulus cloud build up which had been indicated on the weather radar. The pilot experienced severe turbulence and the aircraft was suddenly abruptly and violently flicked into a dive and inverted attitude into the cloud below. Both power levers were immediately retarded and the aircraft recovered on instruments by maintaining the wings level and gentle back pressure on the control column. The aircraft recovered at FL055 at a heading of 180°.

Wrinkles were noted on the outboard side of both wings and a flapless landing was executed at Anjouan aerodrome in order to reduce air loads on the wings.

The aircraft was substantially damaged in that both wings leading edges were kinked and the skin buckled. The crew sustained no injuries.

The last Phase 4 inspection was certified on 14 May 2004 at a total of 3615.7 airframe hours. The accident occurred 14 hours since the Phase 4 inspection was certified.

Probable Cause

Severe turbulence which was composed of violent up- and downdrafts near the gust front caused the aircraft to be violently flicked into a dive and inverted attitude.