Ref: 7597



SOUTH AFRICAN CIVIL AVIATION AUTHORITY ACCIDENT REPORT – EXECUTIVE SUMMARY

Aircraft Registration	N36GC	Dat	te of Accident	24	4 Novem	nber 2002	Time of Accident 07		0750Z	
Type of Aircraft	GLASAIR I	IR II S FT Type of Operation Private								
Pilot-in-command Licence Type		F	Foreign		Age	67	Li	cence Valid	Yes	3
Pilot-in-command Flyi	ng Experie	nce -	Total Flying Hours	S	2049.6		Hours on Type 1035.6		35.6	
Last point of departur	е	Cape	Town (FACT), South Africa							
Next point of intended landing Christ-Church (NZCH), New					w Zealand					
Location of the accident site with reference to easily defined geographical points (GPS readings if possible)										
On Marion Island at a point, S46°53' E37°52'										
Meteorological Inform	iation i	Fine : Surface wind: NW/30 knots, temperature: -9°C , cloud cover: overcast and cloud base of 1500 ft								
Number of people on	board 1		No. of people	e inj	ured	Nil	No	. of people ki	lled	Nil
Synopsis										

The pilot was attempting to fly a solo-bipolar flight which was under the control of Federation Aviation International.

He started his first leg on 17 November 2002 from Cannes in France to Niamey in Niger. His second leg was on 18 November 2002 from Niamey Niger to Cape Town. The third leg was from Cape Town (FACT) to Christ Church (NZCH),New Zealand.

The pilot stated that he waited 5 days in Cape Town for the weather to clear up before continuing with the flight. During the flight he entered severe icing conditions when approaching 60° S and 10° E. The ice build-up was quick and he was forced to descend close to the sea. He used full power to keep the aircraft aloft due to the heavy ice accumulation on the aircraft. Layers of ice accumulated on the wings and increased the weight and drag, causing the aircraft to consume more fuel.

The pilot opted to land at Marion Island because the fuel was running low. There was no official landing area on the island, but the weather team pointed out a typical landing area to him. He stated that he lost most of the ice during his attempted landings.

Although the aircraft was substantially damaged, the pilot only sustained minor injuries. He complained of a painful neck, shoulder and a slight bruise on top of his head but overall he was not injured.

According to the records of scheduled inspections the aircraft was correctly maintained. The last Annual Inspection was certified on 12 May 2002 with total airframe hours of 1039.5. The previous inspection was certified on 21 November 2002 with total airframe hours of 1116.8. The aircraft flew a total of 1135.3 airframe hours at the time of the accident.

Probable Cause

The pilot opted to land at Marion Island because of ice which had accumulated on the wings and was increasing the weight and drag and causing the aircraft to consume more fuel. During the landing on the unprepared landing area, the aircraft was slowed down by soft mire and it nosed over onto its back.