Aviation Safety Investigation Report 198801410

Glaser Dirks DG202

11 December 1988

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Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at <u>www.atsb.gov.au</u>.

Occurrence Number: Location: Date: Highest Injury Level:		198801410 Bacchus Marsh VIC 11 December 1988 Minor			Occurrence Type: Accident Time: 1600	
injuries.		Crew Ground Passenger Total	Fatal 0 0 0 0	Serious 0 0 0 0 0	Minor 0 0 0 1	None 0 - 0 0
Aircraft Details: Registration: Serial Number: Operation Type: Damage Level: Departure Point: Departure Time: Destination:	Glaser I VH-HD 2183 Private Destroy Bacchu 1541 Bacchu	Dirks DG20 OG ved s Marsh VI0 s Marsh VI0	2			

Approved for Release: March 16th 1989

Circumstances:

While conducting a local soaring flight to the north-east of Bacchus Marsh Aerodrome the pilot noticed rain approaching from the west on a broad front. He then noted that heavy rain was falling on the aerodrome but the area to the south-west of the aerodrome appeared to be clearing up. The pilot flew the aircraft towards the clear area and prepared to join the circuit for a landing on strip 27. The pilot reported that he encountered rain and heavy sink all the way back to the circuit area. He joined the circuit turning crosswind earlier than normal. Strong drift and sink were encountered so the pilot immediately turned onto final approach. He reported that when established on final approach at 75 knots the aircraft was not penetrating at all. It was then apparent that the aircraft was not going to get to the field. The pilot turned the aircraft left towards the south to avoid the aerodrome boundary fence but there were no paddocks ahead suitable for a landing. He kept the turn going until the aircraft was heading in an easterly direction away from the aerodrome to make a downwind landing. When he released the airbrakes the aircraft immediately descended rapidly. The pilot said that he could not arrest the descent and the aircraft hit the ground very heavily and broke up. This accident was not the subject of an on-site investigation.

Significant Factors:

The following factors were considered relevant to the development of the accident

- 1. At the time the pilot returned to the aerodrome to land a strong westerly wind and heavy sink conditions existed.
- 2. The pilot did not make an adequate adjustment to his circuit and approach to compensate for those conditions.
- 3. The pilot was forced to make a landing downwind and in the process the aircraft was landed very heavily.

Reccomendations:

The reason why the aircraft was landed very heavily was not determined. However advice was received from the Gliding Federation that a significant increase in the rate of descent occurs in gliders such as this type fitted with air brakes on the upper wing surface only when the air brakes are extended. The Gliding Federation is pursuing this aspect with a view to publishing some information on it to the industry.