Aviation Safety Investigation Report 199400846

Scheibe Flugzeugbau Gmbh Bergfalke III

02 April 1994

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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 www.atsb.gov.au.

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

| Occurrence Number:           | 199400846        | OP400846 Occurrence Type: Accident |              |              |      |       |
|------------------------------|------------------|------------------------------------|--------------|--------------|------|-------|
| Location:                    | Lake Keepit      |                                    |              |              |      |       |
| State:                       | NSW              |                                    | Inv Categor  | <b>:y:</b> 4 |      |       |
| Date:                        | Saturday 02 Apr  | il 1994                            |              |              |      |       |
| Time:                        | 1716 hours       |                                    | Time Zone    | EST          |      |       |
| <b>Highest Injury Level:</b> | Serious          |                                    |              |              |      |       |
| Injuries:                    |                  |                                    |              |              |      |       |
|                              |                  | Fatal                              | Serious      | Minor        | None | Total |
|                              | Crew             | 0                                  | 0            | 1            | 0    | 1     |
|                              | Ground           | 0                                  | 0            | 0            | 0    | 0     |
|                              | Passenger        | 0                                  | 1            | 0            | 0    | 1     |
|                              | Total            | 0                                  | 1            | 1            | 0    | 2     |
| Aircraft Manufacture         | r: Scheibe Flugz | eughau                             | Gmbh         |              |      |       |
| Aircraft Model:              | Bergfalke III    |                                    | Chief        |              |      |       |
| Aircraft Registration:       | VH-GLC           |                                    |              | Serial Num   | ber: |       |
| Type of Operation:           | Non-commerc      | ial Ple                            | asure/Travel |              |      |       |
| Damage to Aircraft:          | Destroyed        |                                    |              |              |      |       |
| <b>Departure Point:</b>      | Lake Keepit N    | SW                                 |              |              |      |       |
| Departure Time:              |                  |                                    |              |              |      |       |
| Destination:                 | Lake Keepit N    | SW                                 |              |              |      |       |
| Crew Details:                |                  |                                    |              |              |      |       |
|                              |                  |                                    |              | Hours of     | on   |       |

|                  | Hours on                |         |            |  |  |
|------------------|-------------------------|---------|------------|--|--|
| Role             | <b>Class of Licence</b> | Туре Но | ours Total |  |  |
| Pilot-In-Command |                         | 1.0     | 700        |  |  |

Approved for Release: Friday, September 2, 1994

The pilot was taking some friends on joy flights. She obtained permission to use a glider parked and ready to fly. Although she had not flown the type before she had flown a type considered to be almost identical. She was also briefed on the altimeter setting procedures in use by the club but was permitted to use her preferred method.

On the first aero-tow the glider released at 4200ft, some 3000ft above the field elevation. This was in accordance with advice received during the pre-flight briefing. No difficulty was encountered with height control during that flight. The second aero-tow was terminated at 3200ft, only 2000ft above field elevation. In the latter stages of that flight the aircraft was very low near the landing area. However, the flight was continued in accordance with a standard circuit.

When turning on to the final, the aircraft was just above the trees. Speed brakes were deployed and the right wingtip struck a tree. The aircraft collided with the ground in a steep nose-down attitude and came to rest inverted. Witnesses assisted in evacuating the occupants.

The gliding community had recently changed altimeter setting procedures from setting zero altitude on the ground (QFE) to setting airfield elevation (QNH). This should have presented no problems to new pilots who would be trained in the new method, but it could present problems to experienced pilots familiar with the old system. This pilot expressed a dislike for the new procedure, saying that it required additional calculations to be made. She was permitted to use whatever system she desired.

For this flight she had set the rear altimeter (she was in the rear seat) using QFE and the front altimeter to QNH. As a result she should have been quite familiar with the readings on her altimeter and been able to correlate those readings with the external appearance of aircraft height.

Some confusion evidently developed during the flight, leading her to become confused as to the significance of the readings from the altimeter. The result was that the aircraft was much lower in the circuit area than she expected and she did not detect the low height from observation outside the aircraft.

The operation of speed brakes on final approach appears to have been a reflex action which was inappropriate under the circumstances.

It is likely that the whole sequence was initiated when the pilot released from the tow about 1000ft lower than on the previous flight. This was probably unintentional and due to misinterpretation of the altitudes indicated on the altimeters. The false perceptions initiated at that time remained with her for the duration of the flight.

## Significant Factors

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

- 1. The pilot was not familiar with the altimeter setting procedures to be used.
- 2. The glider was released from the tow about 1000ft lower than intended.
- 3. The pilot relied upon altimeter readings rather than external reference for height close to the ground.
- 4. The pilot mis-handled the speed brake on final approach.