

**Aviation Safety Investigation Report
199003084**

Brasov IS28-B2

15 July 1990

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

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.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

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.

Occurrence Number: 199003084
Location: Donnington Airpark QLD
Date: 15 July 1990
Highest Injury Level: Fatal
Injuries:

Occurrence Type: Accident

Time: 1053

	Fatal	Serious	Minor	None
Crew	1	0	0	0
Ground	0	0	0	-
Passenger	0	0	0	0
Total	1	0	0	0

Aircraft Details: Brasov IS28-B2
Registration: VH-GFN
Serial Number: N/K
Operation Type: Private
Damage Level: Destroyed
Departure Point: Donnington Airpark QLD
Departure Time: 1053
Destination: Donnington Airpark QLD

Approved for Release: 24th May 1991

Circumstances:

The aircraft was being winch launched on the pilot's second solo flight. Experienced observers on the ground reported that the takeoff appeared normal, but soon after liftoff the aircraft adopted a steeper than normal nose up attitude. The pilot appeared to correct this to some degree but the aircraft continued to climb slightly steeper than normal. A video tape recording of the flight showed that, at a height of between four and five hundred feet above ground level, the tow cable broke. The nose attitude of the aircraft was quickly lowered to what appeared to be a near level flight attitude. A short time later, however, the glider rolled to the left and the nose dropped. The aircraft then spiralled through one and a half turns before impacting the ground. It would appear that, following the cable break, the pilot did not lower the nose sufficiently to maintain flying speed. As a result, the aircraft stalled and then entered a spin. The pilot had not experienced a tow cable break prior to this accident but had been instructed on the procedure to be adopted in the event of such an occurrence. The cable failure would probably have taken the pilot by surprise and this, coupled with his low experience level, could have contributed to the loss of control of the aircraft. These aspects could also have affected the pilot's ability to regain control of the aircraft.

Significant Factors:

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

1. The pilot's experience level was low.
2. The abnormally steep climb during the launch probably caused the tow cable to break.
3. The cable failure probably took the pilot by surprise.

4. The pilot lost control of the aircraft.
5. Control of the aircraft was not regained in the height available.

Reccomendations:

During the investigation, it became apparent that cable failure training methods and standards varied across various gliding clubs. For example, the pilot involved in this accident had apparently received one simulated cable failure during launch. All his other training in this aspect was conducted in free flight at height under simulated launch conditions. At other clubs, students were exposed to simulated cable break situations at varying heights during the launch process including at least two separations below 400 feet for a landing straight ahead. Two exercises were also conducted above 400 feet which required a modified circuit to be flown. The considered advantage in these exercises is that the students were assisted in overcoming any reluctance in lowering the nose of the aircraft at realistic cable break heights. The Gliding Federation of Australia (GFA) Instructor's Handbook page 7-21 states that "simulated launch failures should be carried out at various stages of the launch until the pupil has demonstrated failure (competence?) at any stage of the launch". This statement is somewhat vague and perhaps leaves too much to individual instructor preference in what is a critical area of pre-solo training. The recommendation is made that the GFA revise the GFA Instructor's Handbook to define more clearly the type and number of cable failure simulations which should be conducted and the minimum standard that should be attained.