

**Aviation Safety Investigation Report
199200011**

**Bellanca Aircraft Corp
Scout
Schempp-Hirth GmbH & Co. KG
Standard Cirrus**

08 February 1992

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 Executive Director 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 Executive Director 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.

199200011

Occurrence Number: 199200011 **Occurrence Type:** Accident
Location: TOCUMWAL NSW
State: NSW **Inv Category:** 4
Date: Saturday 08 February 1992
Time: 1245 hours **Time Zone** ESuT
Highest Injury Level: Fatal
Injuries:

	Fatal	Serious	Minor	None	Total
Crew	1	0	0	1	2
Ground	0	0	0	0	0
Passenger	0	0	0	0	0
Total	1	0	0	1	2

Aircraft Manufacturer: Schempp-Hirth GmbH & Co. KG
Aircraft Model: Standard Cirrus B
Aircraft Registration: VH-GQR **Serial Number:**
Type of Operation: Non-commercial Pleasure/Travel
Damage to Aircraft: Destroyed
Departure Point: Tocumwal
Departure Time: 1236 ESuT
Destination: Tocumwal

Crew Details:

Role	Class of Licence	Hours on	
		Type	Hours Total
Pilot-In-Command	None	2.6	81

Aircraft Manufacturer: Bellanca Aircraft Corp
Aircraft Model: 8GCBC
Aircraft Registration: VH-UTK **Serial Number:** 202-76
Type of Operation: Miscellaneous Glider Towing
Damage to Aircraft: Minor
Departure Point: TOCUMWAL
Departure Time: 1240 ESuT
Destination: TOCUMWAL

Crew Details:

Role	Class of Licence	Hours on	
		Type	Hours Total
Pilot-In-Command	Commercial	35.0	725

At approximately 1236 EST, tug VH-KKZ took off towing glider VH-GQR which was towed north of the airfield to a height of 2000 ft, before releasing from the tug. The barograph trace from the glider showed that it had not encountered any thermal activity and was continually descending after release from the tug.

At approximately 1240, tug VH-UTK took off towing glider VH-GZR which was towed north of the airfield to a height of 2200 ft, before releasing from the tug. After the glider released, the tug descended and returned to the airstrip via a standard recovery pattern.

When the glider VH-GQR was first seen by a witness, it was north of the field on the downwind leg of the circuit pattern at approximately 400 ft. The weather conditions at the time were fine, with high-level cirrus cloud. The witness monitored the progress of the approach, and assessed that the glider was lower and closer to the airfield than for a standard circuit. The glider flew a close oblique base leg for strip 09, positioning for landing.

Coincident with the approach of the glider to strip 09, tug VH-UTK, was returning to the airfield for runway 09 after releasing the glider VH- GZR. The tug had turned onto an extended final approach at 900 ft. Approaching 500 ft, the pilot lifted the left wing to check for conflicting traffic turning base for runway 09. The pilot did not see any traffic so continued the approach and at approximately 300 ft, had a momentary glimpse of the glider above the aircraft as they impacted.

The two aircraft remained together momentarily, until the glider separated from the tug and fell away having been cut in two by the propeller of the tug.

Both aircraft were fitted with an aviation transceiver, however no radio transmissions were heard from either pilot. The tug radio was reported to have been on at the time of the accident. The glider radio was recovered from the aircraft for laboratory examination, but due to the extensive damage to the unit, no meaningful information could be acquired from the unit.

Engineering analysis of the glider wing that had sustained propeller slashes, determined that the glider descended onto the left side of the tug, in a wings-level attitude, skidding to the right. The glider had an overtake speed of approximately five knots with a nose-down attitude of three degrees relative to the longitudinal axis of the tug.

Analysis

The aircraft were operating in an un alerted see-and-avoid environment. The tug was a high-wing aircraft, with a resultant masking of upward vision. The expectation of the tug pilot was to have conflicting traffic coming from a standard circuit, however, the accident glider was conducting a non-standard circuit. The glider was painted white and had minimal contrast against the sky background with the sun overhead. For much of the time preceding the impact, the aircraft were on constant tracks with little relative movement to aid visual detection. The combination of the foregoing factors and the final manoeuvring of the glider, placed both pilots in the situation of not being able to sight each other. The use of radio would have alerted the pilots to the presence of the other aircraft in the circuit, and would have added to the safety net.
