

**Aviation Safety Investigation Report
199700214**

**Alexander Schleicher GmbH & Co
ASW 22
Schempp-Hirth GmbH & Co. KG
Nimbus 2C**

24 January 1997

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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.

Occurrence Number: 199700214 **Occurrence Type:** Accident
Location: Roseberry, VIC
State: VIC **Inv Category:** 4
Date: Friday 24 January 1997
Time: 1633 hours **Time Zone** ESuT
Highest Injury Level: Fatal
Injuries:

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

Aircraft Manufacturer: Schempp-Hirth GmbH & Co. KG
Aircraft Model: Nimbus 2C
Aircraft Registration: VH-GWX **Serial Number:** 178
Type of Operation: Non-commercial Pleasure/Travel
Damage to Aircraft: Destroyed
Departure Point: Horsham VIC
Departure Time: 1330 ESuT
Destination: Horsham VIC

Crew Details:

| | | Hours on | |
|------------------|-------------------------|-----------------|--------------------|
| Role | Class of Licence | Type | Hours Total |
| Pilot-In-Command | | 592.2 | 3234 |

Aircraft Manufacturer: Alexander Schleicher GmbH & Co
Aircraft Model: ASW 22
Aircraft Registration: VH-UKG **Serial Number:** 5
Type of Operation: Non-commercial Pleasure/Travel
Damage to Aircraft: Destroyed
Departure Point: Horsham VIC
Departure Time: 1330 ESuT
Destination: Horsham VIC

Crew Details:

| | | Hours on | |
|------------------|-------------------------|-----------------|--------------------|
| Role | Class of Licence | Type | Hours Total |
| Pilot-In-Command | | 75.0 | 1750 |

Approved for Release: Tuesday, July 1, 1997

FACTUAL INFORMATION

During a national gliding competition, several high-performance single-seat gliders were flying on a triangular cross-country task in loose formation at between 2,500 ft and 3,000 ft above ground level (AGL). Lift was not strong and the group were cruising between 65 kts and 85 kts, weaving slightly while looking for rising air. Visibility was in excess of 40 km, there was no cloud below 5,000 ft, and wind was light and variable from the south-east.

VH-UKG was flying near the front of the group and began a left turn in search of rising air when VH-GWX, which had recently joined the group from behind, closed from UKG's left rear position and attempted to pass. The pilot of UKG was unable to see this approaching aircraft due to the restricted visibility to the rear of his glider.

The pilot of UKG became aware of GWX just before impact and attempted to dive under it while still banked slightly left, but the right wing of his glider, because of its long wingspan of 24 m, struck the right side of the fuselage and cockpit of GWX. The impression of the pilot of UKG was that GWX was wings-level and diving slightly just before impact, and that his cockpit passed under the rear section of GWX's tailboom.

When UKG became uncontrollable as the right wing disintegrated, the pilot jettisoned the canopy and exited the aircraft. This was accomplished with some difficulty due to the strong airflow. His parachute deployed at low level and he swung twice under his opened parachute before hitting the ground and injuring his left ankle.

Pilots of the other gliders in the group saw UKG's rolling descent but only one saw what subsequently proved to be GWX pull up to the left from the collision point, perform a "looping-type" manoeuvre and then dive steeply into the ground. Although the pilot of GWX was wearing a parachute, he did not abandon his aircraft and consequently received fatal injuries.

The wreckage trail was mainly in a south-easterly direction (about 125 degrees) and the fuselage of UKG was about 2,000 m from the collision point. The impact point of GWX was about 1,000 m on a bearing of 045 degrees from the collision point. A piece of the canopy of GWX was found about 500 m from the impact point of UKG, about 1,500 m upwind from the collision point, where it had probably been carried in the damaged wing of UKG.

Badly damaged pieces of the outer 3.5-4.0 m of the right wing of UKG had fallen about half-way between the collision point and the impact point of UKG, with various smaller pieces of wing skin and inner wing structure all along the final flight path of UKG. The fuselage and left wing had struck the ground in a near-vertical nose-down attitude at high speed.

GWX had struck the ground at an angle of at least 75 degrees nose-down. The pilot was still strapped in the cockpit and received fatal injuries. All major components were found at the impact site except for most of the perspex from the canopy, which was found between the impact site and the ground below the collision point.

Witnesses of GWX's descent and ground-impact markings indicated that the wings were bent up as though the glider was under high positive "g" loading. There was some confusion after the collision and it was initially thought by the other glider pilots from the group (who were now orbiting the wreckage) that UKG had broken up in flight and that the wreck of GWX was a wing from UKG. After about 30 minutes and radio calls to all aircraft, one of the gliders landed near the wreck of GWX and confirmed that GWX had in fact crashed and that the pilot was dead.

Both aircraft were fitted with radios but minimal communication was being used and collision avoidance relied on "see and avoid" principles.

SAFETY ACTION

As a result of the investigation into this occurrence, the Bureau of Air Safety Investigation issued the following recommendation:

R970094

The Bureau of Air Safety Investigation recommends that the Gliding Federation of Australia (GFA) advise its members that the responsibility for collision avoidance when one glider is overtaking another rests primarily with the pilot of the overtaking glider. Information regarding responsibility for collision avoidance, especially during competitions, should be published as a gliding rule of the air in GFA publications and brought to the attention of pilots by GFA instructors.
