# Aviation Investigation Final Report

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| **Location:** | Saratoga Spring, New York | **Accident Number:** | NYC02LA092 |
| **Date & Time:** | May 5, 2002, 13:30 Local | **Registration:** | N711KR |
| **Aircraft:** | Blanik L-13 | **Aircraft Damage:** | Substantial |
| **Defining Event:** | | **Injuries:** | 2 None |
| **Flight Conducted Under:** | Part 91: General aviation - Instructional | | |

## Analysis

After flying for approximately 1/2 hour, the flight instructor told the student to proceed back to the airport, and enter the traffic pattern. En route, the glider encountered a "heavy sink." The instructor checked the variometer and noted a 1,000-foot per minute descent. He then told the student to increase airspeed in an attempt to fly out of the sink. The instructor then realized they would not make the airport. He took the controls, and because of insufficient altitude to maneuver, setup for a downwind landing to a softball field. The glider touched down in the field, and the instructor executed a ground loop to the left to avoid hitting a fence. No significant weather was reported for the accident time and location.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The glider encountering an unanticipated downdraft, which resulted in insufficient altitude to reach a suitable landing area.

### Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: DESCENT

Findings
1. (C) WEATHER CONDITION - DOWNDRAFT
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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings
2. TERRAIN CONDITION - GROUND

## Factual Information

On May 5, 2002, about 1330 eastern daylight time, a Blanik L-13 (glider) N711KR, was substantially damaged during an off airport forced landing, near the Saratoga Springs Airport (5B2), Saratoga Springs, New York. The certificated flight instructor and student pilot were not injured. Visual meteorological conditions prevailed for the local instructional flight. No flight plan was filed, and the flight was conducted under 14 CFR Part 91.

According to the flight instructor, he and his student boarded the glider, and departed. Once airborne, the glider was towed to 1,500 feet agl, and then was released from the tow-plane about 1-mile east of the airport. After release, the glider continued to climbed to 3,000 feet agl. The student then maneuvered the glider to the south to work several thermals, and then to the northeast.

After flying for approximately 1/2 hour, the instructor told the student to proceed back to the airport, and enter the traffic pattern. While en route and approximately 1.4 miles from the airport at 1,300 to 1,400 feet agl, the glider encountered "heavy sink." The instructor checked the variometer and noted a 1,000-foot per minute descent. He then told the student to increase airspeed in an attempt to fly out of the sink.

When the glider was approximately 0.7 mile from the airport, the instructor realized they were not going to make the runway. He took the controls, and because of insufficient altitude to maneuver, setup for a downwind landing to a softball field. The glider touched down in the field, and the instructor executed a ground loop to the left to avoid hitting a fence straight on. The right wing struck the fence, and the glider came to a stop. Examination of the glider revealed about 5 feet of the wing had broken off from the impact. The instructor added that the glider had a 28:1 glide ratio and was capable of flying 6.8 miles from an altitude of 1,300 feet agl.

A weather observation was taken about 9 minutes before the accident at the Albany International Airport (ALB), Albany, New York, which was located 21 miles to the south of the accident site, and 285 feet msl. According to the observation, the wind was variable at 4 knots, visibility was 10 miles, sky was clear, temperature was 68 degrees Fahrenheit, dew point was 34 degrees Fahrenheit, and the altimeter setting was 30.21 inches of mercury.

Another weather observation was taken about 7 minutes before the accident at the Floyd Bennett Memorial Airport (GFL), Glens Falls, New York, which was located 24 miles to the northeast of the accident site, and 328 feet msl. According to the observation, the wind was variable at 5 knots, visibility was 10 miles, sky was clear, temperature was 66 degrees Fahrenheit, dew point was 36 degrees Fahrenheit, and the altimeter setting was 30.19 inches of mercury.

## Flight instructor Information

| | | | |
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| **Certificate:** | Commercial | **Age:** | 26,Male |
| **Airplane Rating(s):** | None | **Seat Occupied:** | Rear |
| **Other Aircraft Rating(s):** | Glider | **Restraint Used:** | |
| **Instrument Rating(s):** | None | **Second Pilot Present:** | Yes |
| **Instructor Rating(s):** | Glider | **Toxicology Performed:** | No |
| **Medical Certification:** | None | **Last FAA Medical Exam:** | |
| **Occupational Pilot:** | UNK | **Last Flight Review or Equivalent:** | July 31, 2002 |
| **Flight Time:** | 1090 hours (Total, all aircraft), 200 hours (Total, this make and model), 1000 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft) | | |

## Student pilot Information

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| **Certificate:** | Private | **Age:** | 38,Male |
| **Airplane Rating(s):** | Single-engine land | **Seat Occupied:** | Front |
| **Other Aircraft Rating(s):** | Glider | **Restraint Used:** | |
| **Instrument Rating(s):** | None | **Second Pilot Present:** | Yes |
| **Instructor Rating(s):** | None | **Toxicology Performed:** | No |
| **Medical Certification:** | Class 2 Unknown | **Last FAA Medical Exam:** | |
| **Occupational Pilot:** | UNK | **Last Flight Review or Equivalent:** | March 31, 2002 |
| **Flight Time:** | 250 hours (Total, all aircraft) | | |

## Aircraft and Owner/Operator Information

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| **Aircraft Make:** | Blanik | **Registration:** | N711KR |
| **Model/Series:** | L-13 | **Aircraft Category:** | Glider |
| **Year of Manufacture:** | | **Amateur Built:** | |
| **Airworthiness Certificate:** | Normal | **Serial Number:** | 175127 |
| **Landing Gear Type:** | Hull | **Seats:** | 2 |
| **Date/Type of Last Inspection:** | April 26, 2002 Annual | **Certified Max Gross Wt.:** | 1102 lbs |
| **Time Since Last Inspection:** | 10 Hrs | **Engines:** | 0 |
| **Airframe Total Time:** | 2242.7 Hrs as of last inspection | **Engine Manufacturer:** | |
| **ELT:** | Not installed | **Engine Model/Series:** | |
| **Registered Owner:** | Tim Hanke | **Rated Power:** | |
| **Operator:** | Tim Hanke | **Operating Certificate(s) Held:** | None |

## Meteorological Information and Flight Plan

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| **Conditions at Accident Site:** | Visual (VMC) | **Condition of Light:** | Day |
| **Observation Facility, Elevation:** | ALB,285 ft msl | **Distance from Accident Site:** | 187 Nautical Miles |
| **Observation Time:** | 12:51 Local | **Direction from Accident Site:** | 21° |
| **Lowest Cloud Condition:** | Clear | **Visibility** | 10 miles |
| **Lowest Ceiling:** | None | **Visibility (RVR):** | |
| **Wind Speed/Gusts:** | 4 knots / | **Turbulence Type Forecast/Actual:** | / |
| **Wind Direction:** | | **Turbulence Severity Forecast/Actual:** | / |
| **Altimeter Setting:** | 30.2 inches Hg | **Temperature/Dew Point:** | 20°C / 1°C |
| **Precipitation and Obscuration:** | No Obscuration; No Precipitation | | |
| **Departure Point:** | Saratoga Spring, NY (5B2 ) | **Type of Flight Plan Filed:** | None |
| **Destination:** | (5B2 ) | **Type of Clearance:** | None |
| **Departure Time:** | 13:00 Local | **Type of Airspace:** | Class G |

## Airport Information

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| **Airport:** | Saratoga Springs 5B2 | **Runway Surface Type:** | |
| **Airport Elevation:** | | **Runway Surface Condition:** | Unknown |
| **Runway Used:** | | **IFR Approach:** | None |
| **Runway Length/Width:** | | **VFR Approach/Landing:** | Forced landing |

## Wreckage and Impact Information

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| **Crew Injuries:** | 2 None | **Aircraft Damage:** | Substantial |
| **Passenger Injuries:** | | **Aircraft Fire:** | None |
| **Ground Injuries:** | N/A | **Aircraft Explosion:** | None |
| **Total Injuries:** | 2 None | **Latitude, Longitude:** | 43.051109,-73.861114 |

## Administrative Information

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| **Investigator In Charge (IIC):** | Muzio, David |
| **Additional Participating Persons:** | Vincent Morris; FAA/FSDO; Albany, NY |
| **Original Publish Date:** | June 25, 2003 |
| **Last Revision Date:** | |
| **Investigation Class:** | Class |
| **Note:** | |
| **Investigation Docket:** | https://data.ntsb.gov/Docket?ProjectID=54634 |