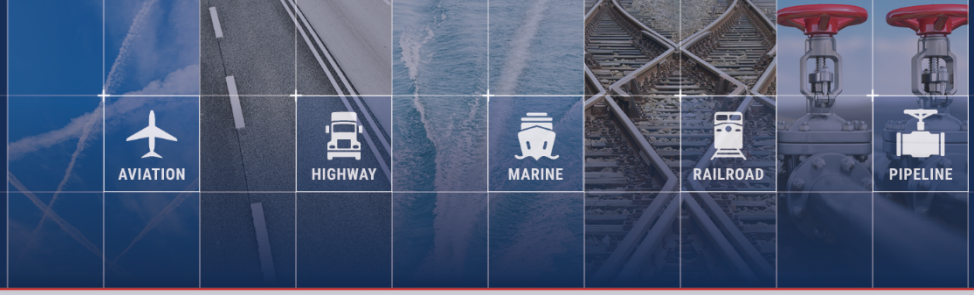


# Aviation Investigation Final Report

| | | | |
|---|---|---|---|
| **Location:** | RENO, Nevada | **Accident Number:** | LAX01LA087 |
| **Date & Time:** | February 4, 2001, 13:50 Local | **Registration:** | N12079 |
| **Aircraft:** | SUTTON TAILWIND W-8L | **Aircraft Damage:** | Destroyed |
| **Defining Event:** | | **Injuries:** | 2 Fatal |
| **Flight Conducted Under:** | Part 91: General aviation - Personal | | |

## Analysis

The airplane was engaged in aerobatic maneuvers at the time of the accident and impacted the ground during a roll. Several witnesses observed the airplane maneuvering at low altitude and estimated the airplane's height at 50 feet prior to commencing the roll. One witness said he did not hear any noise that would indicate engine trouble. Investigators established control continuity. The control yoke was U-shaped with a single handle in front of each pilot position. The left handle bent straight out to the left and twisted counterclockwise; the pilot was outside of the airplane on the left side. The pilot's right hand was lacerated in the palm near the thumb. The pilot's brother flew the airplane earlier in the day, and did not experience any difficulties with the airplane or engine. Investigators examined the engine and observed no discrepancies that would have precluded normal operation of the engine. The kit builder's plans indicated that the airplane was not designed for aerobatics.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot performed aerobatics at low altitude and failed to maintain clearance from the gound resulting in a collision with the terrain.

### Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: MANEUVERING

Findings
1. (C) AEROBATICS - ATTEMPTED - PILOT IN COMMAND
2. (C) ALTITUDE - LOW - PILOT IN COMMAND
3. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

## Factual Information

On February 4, 2001, about 1350 hours Pacific standard time, an amateur-built experimental Sutton Tailwind W-8L, N12079, was destroyed when it collided with terrain while maneuvering 20 miles north of Reno, Nevada. The commercial pilot/owner was operating the airplane under the provisions of 14 CFR Part 91. The pilot and one passenger, who was his son, sustained fatal injuries. The personal flight departed the Reno Stead Airport about 1330. Visual meteorological conditions prevailed, and no flight plan had been filed. The accident's coordinates were 39 degrees 50.347 minutes north latitude and 119 degrees 44.828 minutes west longitude.

According to witnesses interviewed by the Washoe County Sheriff's Office, the airplane was engaged in aerobatic maneuvers at the time of the accident and impacted the ground during a roll. Several witnesses observed the airplane maneuvering at low altitude and estimated the airplane's height at 50 feet prior to commencing the roll. One witness said he did not hear any noise that would indicate engine trouble.

The Federal Aviation Administration (FAA) accident coordinator inspected the wreckage, and established control continuity. The control yoke was U-shaped. Each pilot position, left and right, had a single handle in front of it. These handles connected to a common shaft in the middle of the cabin. The right handle fractured and separated near its base. The passenger was in the right seat and remained in the wreckage. The left handle bent straight out to the left and twisted counterclockwise. The pilot was outside of the airplane on the left side. The pilot's right hand was lacerated in the palm near the thumb. There was no fire.

The FAA coordinator interviewed the pilot's brother. The brother flew the airplane earlier in the day. Seventeen gallons of fuel were added after that flight. The brother reported that he did not experience any difficulties with the airplane or engine.

The FAA coordinator reviewed the airplane's records. The kit builder's plans indicated that the airplane was not designed for aerobatics.

A safety investigator for Textron Lycoming, who manufactured the engine components, inspected the engine under the supervision of the FAA accident coordinator. He reported that the propeller fractured and separated from the crankshaft, and the crankshaft was bent and twisted at the fracture surface. He could not manually rotate the engine. He performed a borescope inspection of the cylinders. He observed no mechanical damage to the pistons, valves, or interior of the cylinders. The spark plugs showed no sign of mechanical damage, and the color of the electrodes corresponded to normal operation according to the Champion Aviation Check-A-Plug AV-27 Chart. He observed no discrepancies that would have precluded normal operation of the engine.

## Pilot Information

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|---|---|---|---|
| **Certificate:** | Commercial; Flight instructor | **Age:** | 39,Male |
| **Airplane Rating(s):** | Single-engine land; Multi-engine land | **Seat Occupied:** | Left |
| **Other Aircraft Rating(s):** | None | **Restraint Used:** | |
| **Instrument Rating(s):** | Airplane | **Second Pilot Present:** | No |
| **Instructor Rating(s):** | Airplane single-engine; Instrument airplane | **Toxicology Performed:** | Yes |
| **Medical Certification:** | Class 2 None | **Last FAA Medical Exam:** | December 30, 2000 |
| **Occupational Pilot:** | UNK | **Last Flight Review or Equivalent:** | |
| **Flight Time:** | 304 hours (Total, all aircraft), 150 hours (Total, this make and model), 100 hours (Last 90 days, all aircraft) | | |

## Aircraft and Owner/Operator Information

| | | | |
|---|---|---|---|
| **Aircraft Make:** | SUTTON TAILWIND | **Registration:** | N12079 |
| **Model/Series:** | W-8L | **Aircraft Category:** | Airplane |
| **Year of Manufacture:** | | **Amateur Built:** | Yes |
| **Airworthiness Certificate:** | Experimental (Special) | **Serial Number:** | 28707 |
| **Landing Gear Type:** | Tailwheel | **Seats:** | 2 |
| **Date/Type of Last Inspection:** | Unknown | **Certified Max Gross Wt.:** | |
| **Time Since Last Inspection:** | | **Engines:** | 1 Reciprocating |
| **Airframe Total Time:** | 551 Hrs at time of accident | **Engine Manufacturer:** | Lycoming |
| **ELT:** | Installed, activated, did not aid in locating accident | **Engine Model/Series:** | O-290-G4 |
| **Registered Owner:** | GERALD W. CODY | **Rated Power:** | 125 Horsepower |
| **Operator:** | | **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:** | RNO,4412 ft msl | **Distance from Accident Site:** | 15 Nautical Miles |
| **Observation Time:** | 13:56 Local | **Direction from Accident Site:** | 150° |
| **Lowest Cloud Condition:** | Few / 5000 ft AGL | **Visibility** | 10 miles |
| **Lowest Ceiling:** | None | **Visibility (RVR):** | |
| **Wind Speed/Gusts:** | / | **Turbulence Type Forecast/Actual:** | / |
| **Wind Direction:** | 0° | **Turbulence Severity Forecast/Actual:** | / |
| **Altimeter Setting:** | 30.29 inches Hg | **Temperature/Dew Point:** | 18°C / 1°C |
| **Precipitation and Obscuration:** | No Obscuration; No Precipitation | | |
| **Departure Point:** | RENO, NV (4SD ) | **Type of Flight Plan Filed:** | None |
| **Destination:** | | **Type of Clearance:** | None |
| **Departure Time:** | 13:30 Local | **Type of Airspace:** | Class G |

## Wreckage and Impact Information

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|---|---|---|---|
| **Crew Injuries:** | 1 Fatal | **Aircraft Damage:** | Destroyed |
| **Passenger Injuries:** | 1 Fatal | **Aircraft Fire:** | None |
| **Ground Injuries:** | N/A | **Aircraft Explosion:** | None |
| **Total Injuries:** | 2 Fatal | **Latitude, Longitude:** | 39.839168,-119.746948 |

## Administrative Information

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|---|---|
| **Investigator In Charge (IIC):** | Plagens, Howard |
| **Additional Participating Persons:** | JERRY ROBERTS; FAA - Flight Standards District Office; RENO, NV |
| **Original Publish Date:** | May 1, 2003 |
| **Last Revision Date:** | |
| **Investigation Class:** | Class |
| **Note:** | The NTSB traveled to the scene of this accident. |
| **Investigation Docket:** | https://data.ntsb.gov/Docket?ProjectID=51433 |