

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

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 ho all aircraft)	urs (Total, this make and model), 100	hours (Last 90 days,

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:	0-290-G4
Registered Owner:	GERALD W. CODY	Rated Power:	125 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

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

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

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:	<u>Class</u>
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51433

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available <u>here</u>.