

Aviation Investigation Final Report

Location: Falcon, Colorado Accident Number: CEN24LA133

Date & Time: March 12, 2024, 09:40 Local Registration: N2905H

Aircraft: Schweizer SGS 2-33A Aircraft Damage: Substantial

Defining Event: Aerodynamic stall/spin **Injuries:** 2 Minor

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The flight instructor stated that during the ground launch he rotated the glider and then accelerated in ground effect before he pulled aft stick to accelerate on the launch arc. He then applied right stick correction for runway alignment after which a gust of wind lifted the right wing. The flight instructor was unable to counter the left roll with flight control inputs and the glider stalled. The tow rope, once side loaded, automatically disconnected as designed. The left wing impacted the ground which resulted in substantial damage to the left wing and empennage. The flight instructor stated that there were no mechanical malfunctions or failures that would have precluded normal glider operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The flight instructor's failure to maintain control during takeoff which resulted in an aerodynamic stall and an impact with terrain.

Findings

Personnel issues	Use of equip/system - Instructor/check pilot	
Environmental issues	Crosswind - Ability to respond/compensate	
Environmental issues	Gusts - Ability to respond/compensate	
Aircraft	Angle of attack - Not attained/maintained	

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Factual Information

History of Flight

Takeoff	Glider tow event
Takeoff	Other weather encounter
Takeoff	Loss of control in flight
Takeoff	Attempted remediation/recovery
Takeoff	Aerodynamic stall/spin (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	59,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	Glider; Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Glider; Helicopter; Instrument helicopter	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 19, 2023
Flight Time:	4269 hours (Total, all aircraft), 127 hours (Total, this make and model), 3499 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	None	Age:	14,Male
Airplane Rating(s):	None	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3 hours (Total, all aircraft), 3 hours (Total, this make and model), 0 hours (Pilot In Command, all aircraft), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Schweizer	Registration:	N2905H
Model/Series:	SGS 2-33A	Aircraft Category:	Glider
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	545
Landing Gear Type:	None; Ski/wheel	Seats:	2
Date/Type of Last Inspection:	August 21, 2023 100 hour	Certified Max Gross Wt.:	1040 lbs
Time Since Last Inspection:		Engines:	0
Airframe Total Time:	8200.2 Hrs	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	High Flights Soaring Club	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KFLY,6878 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	09:15 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.99 inches Hg	Temperature/Dew Point:	8°C / -7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Falcon, CO (KFLY)	Type of Flight Plan Filed:	None
Destination:	Falcon, CO (KFLY)	Type of Clearance:	None
Departure Time:	09:15 Local	Type of Airspace:	Class G

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Airport Information

Airport:	MEADOW LAKE FLY	Runway Surface Type:	Grass/turf
Airport Elevation:	6878 ft msl	Runway Surface Condition:	
Runway Used:	16	IFR Approach:	None
Runway Length/Width:	5001 ft / 200 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	38.94277,-104.5699

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Administrative Information

Investigator In Charge (IIC): Miller, Bradley

Additional Participating Persons:

Original Publish Date: April 19, 2024

Last Revision Date:

Investigation Class: Class 4

Note: The NTSB did not travel to the scene of this accident.

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=193927

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 here.

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