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

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)		

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

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

Administrative Information

Investigator In Charge (IIC):	Miller, Bradley
Additional Participating Persons:	Ed Gassman; FAA; Denver, CO
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