



# Aviation Investigation Final Report

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<b>Location:</b>	Sterling, Massachusetts	<b>Accident Number:</b>	ERA21LA329
<b>Date &amp; Time:</b>	July 15, 2021, 16:00 Local	<b>Registration:</b>	N129MG
<b>Aircraft:</b>	ALEXANDER SCHLEICHER GMBH & CO ASW 27-18	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

According to the pilot, there was a slight depression in the narrow, paved strip used for glider takeoffs, and that during the takeoff roll, the left wing “flexed” and “dipped” such that the wingtip contacted the turf which created the pivot point around which the glider “ground-looped” which fractured the empennage aft of the cockpit.

The pilot added that there had been “3 weeks of heavy rain” prior to the day of the accident and that the grass on either side of the takeoff strip was longer than usual, which reduced his wingtip clearance. He stated that while he had successfully departed the strip earlier that day, a lower grass height would have lowered his risk exposure during the takeoff run.

The pilot reported that there were no pre-accident mechanical malfunctions or anomalies that would have precluded normal operation.

## Probable Cause and Findings

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

The pilot’s failure to maintain the glider’s stability in the roll axis during the takeoff roll, which resulted in a dragged wingtip and ground loop.

## Findings

<b>Aircraft</b>	Lateral/bank control - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot

## Factual Information

### History of Flight

<b>Takeoff</b>	Loss of control on ground (Defining event)
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### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	70
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Single
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	None	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	July 15, 2020
<b>Flight Time:</b>	3216 hours (Total, all aircraft), 435 hours (Total, this make and model), 323 hours (Pilot In Command, all aircraft), 63 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	ALEXANDER SCHLEICHER GMBH & CO	<b>Registration:</b>	N129MG
<b>Model/Series:</b>	ASW 27-18	<b>Aircraft Category:</b>	Glider
<b>Year of Manufacture:</b>	2012	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	29081
<b>Landing Gear Type:</b>	Retractable -	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	November 1, 2020 Annual	<b>Certified Max Gross Wt.:</b>	1322 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	0
<b>Airframe Total Time:</b>	472 Hrs at time of accident	<b>Engine Manufacturer:</b>	
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KFIT,348 ft msl	<b>Distance from Accident Site:</b>	8 Nautical Miles
<b>Observation Time:</b>	15:52 Local	<b>Direction from Accident Site:</b>	12°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	9 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	230°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.04 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Sterling, MA	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Sterling, MA	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	STERLING 3B3	<b>Runway Surface Type:</b>	Asphalt,Grass/turf
<b>Airport Elevation:</b>	459 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	34	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2800 ft / 10 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	42.425917,-71.792861(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Rayner, Brian
<b>Additional Participating Persons:</b>	Joseph Whitley; FAA FSDO; Enfield, CT
<b>Original Publish Date:</b>	May 17, 2022
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=103721">https://data.nts.gov/Docket?ProjectID=103721</a>

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](#).