



# Aviation Investigation Final Report

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<b>Location:</b>	Andover Township, New Jersey	<b>Accident Number:</b>	ERA21LA375
<b>Date &amp; Time:</b>	September 14, 2021, 14:00 Local	<b>Registration:</b>	N948FS
<b>Aircraft:</b>	AMERICAN LEGEND AIRCRAFT CO AL3	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Nose over/nose down	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The student pilot was landing the tailwheel-equipped airplane on a soft turf runway that had experienced heavy rainfall the evening before. Upon touchdown, about a third of the way down the runway, the airplane bounced slightly before settling onto the turf; the pilot applied the brakes during the landing roll, the airplane turned left, then immediately nosed over and came to rest inverted. The impact resulted in substantial damage to the wing struts and vertical stabilizer. The pilot stated that the airplane had no preimpact mechanical malfunctions or failures 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 student pilot's excessive asymmetrical application of the brakes, which resulted in a nose over.

## Findings

<b>Aircraft</b>	Landing gear brakes system - Incorrect use/operation
<b>Personnel issues</b>	Incorrect action performance - Pilot
<b>Environmental issues</b>	Soft surface - Effect on equipment

## Factual Information

### History of Flight

Landing-landing roll	Nose over/nose down (Defining event)
Landing-landing roll	Loss of control on ground

### Pilot Information

Certificate:	Student	Age:	65, Male
Airplane Rating(s):	None	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Sport pilot	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 14, 2021
Flight Time:	187 hours (Total, all aircraft), 15 hours (Total, this make and model), 40 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	AMERICAN LEGEND AIRCRAFT CO	Registration:	N948FS
Model/Series:	AL3	Aircraft Category:	Airplane
Year of Manufacture:	2006	Amateur Built:	
Airworthiness Certificate:	Special light-sport (Special)	Serial Number:	AL-1053
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	February 1, 2021 Annual	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	562 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	O-200
Registered Owner:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	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>	12N,580 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	14:54 Local	<b>Direction from Accident Site:</b>	76°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.04 inches Hg	<b>Temperature/Dew Point:</b>	27°C / 21°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Old Bridge, NJ (3N6)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Andover Township, NJ	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	13:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	AEROFLEX-ANDOVER 12N	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	582 ft msl	<b>Runway Surface Condition:</b>	Soft
<b>Runway Used:</b>	03/21	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	1981 ft / 50 ft	<b>VFR Approach/Landing:</b>	Straight-in

## 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>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	41.00862,-74.738034(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Mccarter, Lawrence
<b>Additional Participating Persons:</b>	Scott Kuhns; FAA FSDO; Allentown, PA
<b>Original Publish Date:</b>	May 25, 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.ntsb.gov/Docket?ProjectID=103941">https://data.ntsb.gov/Docket?ProjectID=103941</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](#).