



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Waco, TX	<b>Accident Number:</b>	GAA19CA510
<b>Date &amp; Time:</b>	08/24/2019, 1200 CDT	<b>Registration:</b>	N173JE
<b>Aircraft:</b>	AMERICAN LEGEND AIRCRAFT CO AL3C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Nose over/nose down	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

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## Analysis

The flight instructor reported that the student pilot had touched down on his fourth landing of the training flight. During the landing roll, the student overcontrolled the rudder, and the airplane veered left, and he then overcorrected to the right. The instructor took the flight controls and applied left rudder and left brake, but the airplane exited the right side of the runway, sank into soft dirt, and nosed over. The airplane sustained substantial damage to the rudder and left wing lift strut. The instructor reported that there were no mechanical malfunctions or failures with the airplane 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 failure to maintain directional control during the landing roll, which resulted in a runway excursion and noseover.

## Findings

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<b>Aircraft</b>	Directional control - Not attained/maintained (Cause)
<b>Personnel issues</b>	Aircraft control - Student pilot (Cause)
<b>Environmental issues</b>	Soft surface - Effect on operation (Cause)

## Factual Information

### History of Flight

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

### Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	43, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Rear
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last FAA Medical Exam:	12/16/2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	06/28/2019
Flight Time:	(Estimated) 1059 hours (Total, all aircraft), 684 hours (Total, this make and model), 990 hours (Pilot In Command, all aircraft), 199 hours (Last 90 days, all aircraft), 74 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Student Pilot Information

Certificate:	Student	Age:	16, Male
Airplane Rating(s):	None	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 9 hours (Total, all aircraft), 9 hours (Total, this make and model), 9 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	AMERICAN LEGEND AIRCRAFT CO	Registration:	N173JE
Model/Series:	AL3C 100	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	AL-1025
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	05/28/2019, Condition	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	617 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	O-200
Registered Owner:	Hammons, Matthew	Rated Power:	100 hp
Operator:	On file	Operating Certificate(s) Held:	None
Operator Does Business As:	Waco Flight Training	Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KACT, 508 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	1651 UTC	Direction from Accident Site:	117°
Lowest Cloud Condition:	Scattered / 3200 ft agl	Visibility	10 Miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	30° C / 23° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Waco, TX (3T8)	Type of Flight Plan Filed:	None
Destination:	Waco, TX (3T8)	Type of Clearance:	None
Departure Time:	1155 CDT	Type of Airspace:	Class G

## Airport Information

Airport:	Wildcat Canyon (3T8)	Runway Surface Type:	Grass/turf
Airport Elevation:	660 ft	Runway Surface Condition:	Dry; Rough; Vegetation
Runway Used:	15	IFR Approach:	None
Runway Length/Width:	2450 ft / 60 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	31.404167, -97.214444 (est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Michael A Hicks	<b>Report Date:</b>	03/17/2020
<b>Additional Participating Persons:</b>	Richard Long; FAA; San Antonio, TX		
<b>Publish Date:</b>	03/17/2020		
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.		
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=100140">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=100140</a>		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).