



# **Aviation Investigation Final Report**

Location:	McKinney, Texas	Accident Number:	CEN09CA261
Date & Time:	April 20, 2009, 17:42 Local	Registration:	N273MS
Aircraft:	American Legend AL-3C	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

# Analysis

During the landing rollout in gusty wind conditions, the commercial pilot applied too much pressure on the heel brake of his tailwheel-equipped single-engine airplane, which caused the tail to rise. The wind then carried the airplane over on to its back, which resulted in substantial damage to the left wing strut and vertical stabilizer.

# **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 control of the airplane during landing. Contributing to the accident were gusty crosswinds.

# Findings Environmental issues Gusts - Effect on equipment Personnel issues Unnecessary action - Pilot Environmental issues Crosswind - Effect on equipment Aircraft Surface speed/braking - Incorrect use/operation

# **Factual Information**

# History of Flight

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

#### **Pilot Information**

Certificate:	Commercial	Age:	54
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2919 hours (Total, all aircraft), 88 hours (Total, this make and model)		

# Aircraft and Owner/Operator Information

Aircraft Make:	American Legend	Registration:	N273MS
Model/Series:	AL-3C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	AL-1051
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	0-200
Registered Owner:	McRight-Smith Aviation, LP	Rated Power:	100 Horsepower
Operator:	McRight-Smith Aviation, LP	Operating Certificate(s) Held:	None

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	McKinney, TX (TKI )	Type of Flight Plan Filed:	Unknown
Destination:	McKinney, TX (TKI )	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class D

# **Airport Information**

Airport:	Collin COunty Regional Airport TKI	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	17	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 None	Latitude, Longitude:	33.173332,-96.587501(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Yeager, Leah
Additional Participating Persons:	David Stughart; FAA/FSDO; Dallas, TX
Original Publish Date:	June 11, 2009
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=73705

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 <u>here</u>.