



# Aviation Investigation Final Report

<b>Location:</b>	Terrell, Texas	<b>Accident Number:</b>	CEN09CA166
<b>Date &amp; Time:</b>	February 7, 2009, 13:00 Local	<b>Registration:</b>	N5303W
<b>Aircraft:</b>	Piper PA-28	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Landing area undershoot	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The commercial pilot was on final approach to landing on a 2,630 foot long by 30 foot wide asphalt runway with direct crosswinds at 15 knots, gusting to 21 knots. The airplane suddenly stalled and airplane crashed short of the threshold and bounced onto the runway causing substantial damage to both wings, the fuselage, and all three landing gear. The pilot reported that he had a total of eight hours in the same type or airplane, had flown a total on one hour in the past 90 days, and he had not completed flight review within the previous 24 calendar months. The two persons onboard reported they were not injured.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The commercial pilot's failure to maintain adequate airspeed during the approach which resulted in an aerodynamic stall. Contributing to the accident was the pilot's lack of recent flight experience.

## Findings

<b>Personnel issues</b>	Recent experience - Pilot
<b>Aircraft</b>	Airspeed - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot

## Factual Information

### History of Flight

<b>Landing</b>	Other weather encounter
<b>Landing</b>	Aerodynamic stall/spin
<b>Landing-flare/touchdown</b>	Landing area undershoot (Defining event)

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	68, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	June 26, 2008
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	August 5, 2006
<b>Flight Time:</b>	371 hours (Total, all aircraft), 8 hours (Total, this make and model), 1 hours (Last 90 days, all aircraft)		

### Flight instructor Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	22, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Unknown	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	November 6, 2008
<b>Flight Time:</b>	525 hours (Total, all aircraft), 100 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N5303W
<b>Model/Series:</b>	PA-28	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	28-354
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	February 6, 2009 Annual	<b>Certified Max Gross Wt.:</b>	2150 lbs
<b>Time Since Last Inspection:</b>	2 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2307 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	O-320 series
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	150 Horsepower
<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>	KTRL,474 ft msl	<b>Distance from Accident Site:</b>	8 Nautical Miles
<b>Observation Time:</b>	12:53 Local	<b>Direction from Accident Site:</b>	140°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Overcast / 3900 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	15 knots / 21 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	200°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.19 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 14°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Terrell, TX (1F7)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Terrell, TX (1F7)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:55 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Airpark East Airport 1F7	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	510 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	13	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2630 ft / 30 ft	<b>VFR Approach/Landing:</b>	Unknown

## 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>	32.808334,-96.351112(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Latson, Thomas
<b>Additional Participating Persons:</b>	Thomas J Tucker; FAA Dallas FSDO; Irving, TX
<b>Original Publish Date:</b>	May 12, 2009
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=73359">https://data.nts.gov/Docket?ProjectID=73359</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](#).