

# **Aviation Investigation Final Report**

Location: Terrell, Texas Accident Number: CEN09CA484

Date & Time: August 1, 2009, 10:40 Local Registration: N8602C

Aircraft: Piper PA22 Aircraft Damage: Substantial

**Defining Event:** Loss of control on ground **Injuries:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

According to the pilot, during his approach to land he observed thunderstorms in the vicinity of the airport and observed moisture on the windscreen of the airplane. He elected to continue the approach and encountered strong turbulence during the base and final legs of the approach. During the turbulent encounter on short final, the airplane was turned 30 degrees to the right of runway heading and the nose was forced upward. The pilot regained control of the airplane and landed firmly on the runway surface. The airplane departed the left side of the runway, the left wing "dug" into the grass surface, cartwheeled, and came to rest inverted. The outboard four feet of the left wing and the firewall of the airplane were bent. According to the pilot and a Federal Aviation Administration inspector, there were no mechanical anomalies with the airplane. Witnesses observing the flight indicated that the wind shifted from a right quartering head wind to a right quartering tail wind and increased in velocity while the airplane was on short final.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper decision to continue the approach and landing during thunderstorm activity, resulting in the loss of aircraft control.

## **Findings**

Environmental issues	Thunderstorm - Effect on operation
Personnel issues	Decision making/judgment - Pilot

Environmental issues Thunderstorm - Decision related to condition

Aircraft (general) - Not attained/maintained

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## **Factual Information**

### **History of Flight**

**Landing** Windshear or thunderstorm

Landing-landing roll Loss of control on ground (Defining event)

Landing-landing roll Runway excursion

#### **Pilot Information**

Certificate:	Private	Age:	68,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	July 2, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 30, 2009
Flight Time:	572 hours (Total, all aircraft), 3 hours (Total, this make and model), 572 hours (Pilot In Command, all aircraft), 3 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

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## **Aircraft and Owner/Operator Information**

Aircraft Make:	Piper	Registration:	N8602C
Model/Series:	PA22 135	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	221282
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	July 30, 2009 Annual	Certified Max Gross Wt.:	1950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1986 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	0290-02
Registered Owner:	Alvin L. Good	Rated Power:	135 Horsepower
Operator:	Alvin L. Good	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KTRL	Distance from Accident Site:	
Observation Time:	12:53 Local	Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	7 knots / 14 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	31°C / 23°C
Precipitation and Obscuration:			
Departure Point:	Seguin, TX (E70)	Type of Flight Plan Filed:	None
Destination:	Terrell, TX (TRL )	Type of Clearance:	None
Departure Time:	08:30 Local	Type of Airspace:	

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## **Airport Information**

Airport:	Terrell Municipal Airport TRL	Runway Surface Type:	Asphalt
Airport Elevation:	474 ft msl	<b>Runway Surface Condition:</b>	Unknown
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	5006 ft / 75 ft	VFR Approach/Landing:	Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	32.709167,-96.267219

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#### **Administrative Information**

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	Benoit O LaFargue; Federal Aviation Administration; Dallas, TX
Original Publish Date:	October 19, 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=74429

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.

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