



# Aviation Investigation Final Report

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<b>Location:</b>	Pittsburgh, Pennsylvania	<b>Accident Number:</b>	ERA09CA402
<b>Date &amp; Time:</b>	July 14, 2009, 13:20 Local	<b>Registration:</b>	N21NC
<b>Aircraft:</b>	Cessna T337	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Runway excursion	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

While on the downwind leg of the airport traffic pattern for runway 17, the pilot was advised over the airport traffic frequency that winds were favoring runway 35. The pilot elected to continue the approach to runway 17, since he could "clearly see the wind sock," which was indicating a "direct crosswind." During the landing flare, the pilot encountered an "updraft" and landed approximately "half way" down the 3,500-foot- long runway. Upon touchdown, he retracted the wing flaps, applied "very strong" pressure on the brakes, and made "shallow turns" in an attempt to stop the airplane. The airplane ran off the end of the runway, and came to rest in a ditch approximately 10 to 20 feet beyond the runway edge. A Federal Aviation Administration inspector who examined the airplane after the accident reported that it sustained substantial damage to the engine firewall, and exhibited extensive wrinkling and buckling of the fuselage, particularly at the wing roots. The pilot reported no mechanical anomalies. The nearest weather reporting station, located 12 nautical miles northwest of the accident site, reported wind direction variable between 280 degrees and 350 degrees at 7 knots at the time of the accident. The pilot stated that he should have landed on runway 35, since there were "several hills" on the approach to runway 17, and "turbulence and updrafts made speed control and altitude control difficult." In addition, runway 17 had a "downhill slope."

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to obtain the proper touchdown point during landing.

## Findings

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<b>Aircraft</b>	Descent/approach/glide path - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Landing area overshoot
<b>Landing-landing roll</b>	Runway excursion (Defining event)
<b>Landing-landing roll</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	64, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	March 10, 2009
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	July 4, 2009
<b>Flight Time:</b>	4425 hours (Total, all aircraft), 381 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N21NC
<b>Model/Series:</b>	T337 D	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	337-1022
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	July 14, 2008 Annual	<b>Certified Max Gross Wt.:</b>	4500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	2456 Hrs as of last inspection	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	TSIO360-A
<b>Registered Owner:</b>	Bosh Aviation LLC	<b>Rated Power:</b>	210 Horsepower
<b>Operator:</b>	James H Boschma	<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>	BTP,1248 ft msl	<b>Distance from Accident Site:</b>	12 Nautical Miles
<b>Observation Time:</b>	13:15 Local	<b>Direction from Accident Site:</b>	330°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	280°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.15 inches Hg	<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Brownsboro, AL (3M5 )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Pittsburgh, PA (9GI )	<b>Type of Clearance:</b>	Traffic advisory;VFR flight following
<b>Departure Time:</b>	09:00 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Rock Airport 9GI	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	1063 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	17	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3550 ft / 100 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## 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>	40.603332,-79.82611(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Wilson, Ralph
<b>Additional Participating Persons:</b>	Andy Pierce; FAA/FSDO; Pittsburgh, PA
<b>Original Publish Date:</b>	October 19, 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.ntsb.gov/Docket?ProjectID=74278">https://data.ntsb.gov/Docket?ProjectID=74278</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.

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