



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Montgomery, AL	<b>Accident Number:</b>	ATL04LA114
<b>Date &amp; Time:</b>	03/02/2004, 1120 CDT	<b>Registration:</b>	N91734
<b>Aircraft:</b>	Piper PA-46-350P	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General Aviation -		

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## Analysis

The pilot landed on runway 28 with a crosswind from the left. After touchdown, the airplane yawed to the left. The pilot started correcting for the yaw but the correction felt to be too strong for the airplane to handle. The pilot allowed the airplane to drift to the left, eventually departing the runway on the left side onto the grass. Twenty yards from the runway, the nose gear dug into the soft grass and collapsed. Examination of the airplane revealed the nose gear collapsed, the propeller broken and damage to the firewall. The right main landing gear and the right wing tip were also bent. The nose gear trunnion was sent to the NTSB Materials Laboratory for a fracture analysis. The trunnion from the nose gear assembly was examined and the fracture faces contained no evidence of a fatigue crack or other preexisting condition leading to the fracture. According to the pilot's handbook the, the demonstrated crosswind component for the Piper PA-46-350P is 17 knots. The reported surface winds at the time of the accident were 200 degrees at 10 knots. The pilot's had accumulated a total of 1300 hours in the PA-46.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate compensation for wind and his failure to maintain directional control during landing roll that resulted in the collapse of the nose gear. The crosswind was a contributing factor.

## Findings

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Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

### Findings

1. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. WEATHER CONDITION - CROSSWIND

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

### Findings

4. TERRAIN CONDITION - GRASS

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Occurrence #3: NOSE GEAR COLLAPSED  
Phase of Operation: LANDING - ROLL

### Findings

5. LANDING GEAR, NOSE GEAR - OVERLOAD

## Factual Information

On March 2, 2004, at 1120 central daylight time, a Piper PA-46-350P, N91734, registered to and operated by a private pilot, nose gear collapsed during a landing on runway 28 at the Montgomery Regional Airport in Montgomery, Alabama. The personal flight operated under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The private pilot was not injured, and the airplane sustained substantial damage. The flight departed Montgomery Regional Airport at 1040.

The pilot landed on runway 28 with a crosswind from the left. After touchdown, the airplane yawed to the left. The pilot stated that he started correcting for the yaw but the correction felt to be too strong for the airplane to handle. The pilot allowed the airplane to drift to the left, eventually departing the runway on the left side onto the grass. Twenty yards from the runway, the nose gear dug into the soft grass and collapsed.

Examination of the airplane revealed the nose gear had collapsed, the propeller assembly was broken, and there was damage to the engine compartment firewall. The right main landing gear and the right wing tip were also bent. The nose gear trunnion was sent to the NTSB Materials Laboratory for a fracture analysis. The trunnion from the nose gear assembly was examined and the fracture faces contained no evidence of a fatigue crack or other preexisting condition leading to the fracture.

According to the pilot's handbook the, the demonstrated crosswind component for the Piper PA-46-350P is 17 knots. The reported surface winds at the time of the accident were 200 degrees at 10 knots. The pilot's had accumulated a total of 1300 hours in the PA-46.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	52, 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>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last Medical Exam:</b>	10/01/2003
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	08/15/2003
<b>Flight Time:</b>	1875 hours (Total, all aircraft), 1200 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Piper	Registration:	N91734
Model/Series:	PA-46-350P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	4622040
Landing Gear Type:	Tricycle	Seats:	6
Date/Type of Last Inspection:	07/28/2003, Annual	Certified Max Gross Wt.:	4300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1159 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	TIO-540-AE2A
Registered Owner:	Robert Struan Company Inc	Rated Power:	350
Operator:	Howard M. Robertson	Air Carrier Operating Certificate:	None

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	MGM, 221 ft msl	Observation Time:	1052 CDT
Distance from Accident Site:	0 Nautical Miles	Condition of Light:	
Direction from Accident Site:	0°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Unknown	Temperature/Dew Point:	24° C / 21° C
Lowest Ceiling:	Broken / 7500 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	12 knots, 200°	Visibility (RVR):	
Altimeter Setting:	30.23 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Montgomery, AL (MGM)	Type of Flight Plan Filed:	Unknown
Destination:		Type of Clearance:	Unknown
Departure Time:	1040 CDT	Type of Airspace:	Class E

## Airport Information

Airport:	Montgomery Regional (KMGM)	Runway Surface Type:	Asphalt
Airport Elevation:	0 ft	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	9010 ft / 150 ft	VFR Approach/Landing:	Full Stop

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor		

## Administrative Information

**Investigator In Charge (IIC):** Phillip Powell **Adopted Date:** 02/24/2005

**Additional Participating Persons:** Ed Blount; Birmingham FSDO

**Publish Date:**

**Investigation Docket:** NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at [pubinq@ntsb.gov](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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