



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Old Bridge, NJ	<b>Accident Number:</b>	ERA15CA043
<b>Date &amp; Time:</b>	11/03/2014, 1110 EST	<b>Registration:</b>	N7102D
<b>Aircraft:</b>	PIPER PA 22-150	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

According to the pilot, while in the landing flare, the tailwheel-equipped airplane began to roll to the left. He applied right aileron to counteract the roll and provide wind correction; however, as the airplane decelerated during the landing roll, it lacked rudder authority to counteract a gust of wind from the right. The airplane ground looped 180 degrees to the right, and the left main landing gear collapsed, resulting in substantial damage to the outboard portion of the left wing and left horizontal stabilizer. The pilot reported no preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation. Recorded wind velocity at a nearby airport about the time of the accident was 15 knots, with gusts to 25 knots.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's loss of control while landing the tailwheel-equipped airplane in gusting wind conditions, which resulted in a ground loop.

## Findings

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<b>Aircraft</b>	Directional control - Not attained/maintained (Cause)
<b>Personnel issues</b>	Aircraft control - Pilot (Cause)
<b>Environmental issues</b>	Gusts - Effect on operation

## Factual Information

### History of Flight

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

Certificate:	Private	Age:	43
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 Medical Exam:	07/12/2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	06/12/2013
Flight Time:	392 hours (Total, all aircraft), 28 hours (Total, this make and model), 266 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N7102D
Model/Series:	PA 22-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	22-4959
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	C91 installed, not activated	Engine Model/Series:	O-320 A2A
Registered Owner:	On file	Rated Power:	150 hp
Operator:	On file	Air Carrier Operating Certificate:	None

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	BLM, 164 ft msl	Observation Time:	1135 EST
Distance from Accident Site:	14 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	130°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	12° C / 3° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	15 knots/ 25 knots, 290°	Visibility (RVR):	
Altimeter Setting:	30.15 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SOMERVILLE, NJ (SMQ)	Type of Flight Plan Filed:	None
Destination:	Old Bridge, NJ (3N6)	Type of Clearance:	VFR
Departure Time:	1050 EST	Type of Airspace:	

## Airport Information

Airport:	OLD BRIDGE (3N6)	Runway Surface Type:	Asphalt
Airport Elevation:	87 ft	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	3594 ft / 50 ft	VFR Approach/Landing:	Full Stop

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	Shawn Etcher	Adopted Date:	12/15/2014
Additional Participating Persons:	Michael McNeely; FAA/FSDO; Teterboro, NJ		
Publish Date:	10/08/2015		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	<a href="http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=90353">http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=90353</a>		

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