



# Aviation Investigation Final Report

<b>Location:</b>	Hanover Township, Pennsylvania	<b>Accident Number:</b>	ERA17LA328
<b>Date &amp; Time:</b>	September 16, 2017, 16:49 Local	<b>Registration:</b>	N38365
<b>Aircraft:</b>	Piper J3C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Abrupt maneuver	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The private pilot was conducting a local, personal flight. He reported that, about 1,000 ft above ground level and as he began turning the airplane left, it rolled faster than he expected and then "rolled over" into an inverted attitude. The pilot regained control of the airplane, and when the airplane was straight and level, he saw treetops. He tried to pull up, but the airplane impacted trees and then terrain, which resulted in substantial damage to the airframe.

The pilot stated, and a postaccident examination of the airplane confirmed, that there were no preaccident mechanical malfunctions or failures of the flight controls that would have precluded normal operation.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain roll control while maneuvering, which resulted in a collision with trees and terrain.

## Findings

### Personnel issues

Aircraft control - Pilot

### Aircraft

Lateral/bank control - Not attained/maintained

# Factual Information

## History of Flight

<b>Maneuvering-low-alt flying</b>	Abrupt maneuver (Defining event)
<b>Maneuvering-low-alt flying</b>	Loss of control in flight
<b>Uncontrolled descent</b>	Collision with terr/obj (non-CFIT)

On September 16, 2017, about 1649 eastern daylight time, a Piper J3C-65, N38365, was substantially damaged when it impacted trees and terrain while maneuvering near Hanover Township, Pennsylvania. The private pilot and pilot-rated passenger received minor injuries. Visual meteorological conditions prevailed and no flight plan was filed for the local personal flight that departed Herron Airport (7G1), New Cumberland, West Virginia. The airplane was operated under the provisions of 14 *Code of Federal Regulations* Part 91.

According to the pilot, he and the passenger made two previous local flights that day before the accident flight. During the third flight of the day, approximately 1,000 ft above ground level, he started a left turn and the airplane rolled over into an inverted attitude. The pilot further stated, "in a bat of an eye it rolled over." He then corrected the roll and when the airplane was straight and level, he saw some tree tops. He tried to pull up, but the airplane contacted the tree tops and impacted the ground. The pilot stated there were no mechanical issues with the airplane that would have precluded normal operations.

According to the pilot-rated passenger, they were flying along with friends, who were flying their airplanes. One of their friend's airplanes passed them to the left and they were going to turn left and follow it. During the turn to the left, the airplane rolled over. She further stated, "it rolled over so fast she could not believe it." They contacted some tree tops and impacted the ground. She stated there were no mechanical issues with the airplane that would have precluded normal operations.

Examination of the wreckage by a Federal Aviation Administration inspector revealed that the airplane had sustained damage to the forward and aft wing spar on the left wing. The right main landing gear was separated. One propeller blade was bent. The bulkhead fuel tank was ruptured. Cable continuity was established to all flight controls.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	23,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<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 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	February 17, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	June 30, 2017
<b>Flight Time:</b>	(Estimated) 230 hours (Total, all aircraft), 195 hours (Total, this make and model), 40 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 1.5 hours (Last 24 hours, all aircraft)		

## Pilot-rated passenger Information

<b>Certificate:</b>	Private	<b>Age:</b>	24,Female
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<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 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	April 30, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	June 30, 2017
<b>Flight Time:</b>	127 hours (Total, all aircraft), 0 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N38365
<b>Model/Series:</b>	J3C 65	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1941	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	6973
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	June 10, 2017 Annual	<b>Certified Max Gross Wt.:</b>	1220 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3200 Hrs as of last inspection	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	C91A installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	C-90-8
<b>Registered Owner:</b>		<b>Rated Power:</b>	90 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>	KPIT, 1203 ft msl	<b>Distance from Accident Site:</b>	9 Nautical Miles
<b>Observation Time:</b>	20:51 Local	<b>Direction from Accident Site:</b>	105°
<b>Lowest Cloud Condition:</b>	Scattered / 3800 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 6500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	120°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.14 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 17°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	NEW CUMBERLAND, WV (7G1 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	NEW CUMBERLAND, WV (7G1 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:30 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor	<b>Latitude, Longitude:</b>	40.523612,-80.406387(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Boggs, Daniel
<b>Additional Participating Persons:</b>	Gary Ankney; FAA/FSDO; Allegheny, PA
<b>Original Publish Date:</b>	April 13, 2020
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=96036">https://data.nts.gov/Docket?ProjectID=96036</a>

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).