



Aviation Investigation Final Report

Location:	Hanover Township, Pennsylvania	Accident Number:	ERA17LA328
Date & Time:	September 16, 2017, 16:49 Local	Registration:	N38365
Aircraft:	Piper J3C	Aircraft Damage:	Substantial
Defining Event:	Abrupt maneuver	Injuries:	2 Minor
Flight Conducted Under:	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

Maneuvering-low-alt flying	Abrupt maneuver (Defining event)
Maneuvering-low-alt flying	Loss of control in flight
Uncontrolled descent	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

Certificate:	Private	Age:	23, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	February 17, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 30, 2017
Flight Time:	(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

Certificate:	Private	Age:	24, Female
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	April 30, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 30, 2017
Flight Time:	127 hours (Total, all aircraft), 0 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N38365
Model/Series:	J3C 65	Aircraft Category:	Airplane
Year of Manufacture:	1941	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	6973
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 10, 2017 Annual	Certified Max Gross Wt.:	1220 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3200 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	C-90-8
Registered Owner:	On file	Rated Power:	90 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KPIT, 1203 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	20:51 Local	Direction from Accident Site:	105°
Lowest Cloud Condition:	Scattered / 3800 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 6500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	26°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	NEW CUMBERLAND, WV (7G1)	Type of Flight Plan Filed:	None
Destination:	NEW CUMBERLAND, WV (7G1)	Type of Clearance:	None
Departure Time:	16:30 Local	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

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

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](#).