



Aviation Investigation Factual Report

Location:	E.Stroudsburg, Pennsylvania	Accident Number:	NYC07LA168
Date & Time:	July 15, 2007, 22:50 Local	Registration:	N7389J
Aircraft:	Piper PA-28-140	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Factual Information

HISTORY OF FLIGHT

On July 15, 2007, about 2250 eastern daylight time, a Piper PA-28-140, N7389J, was substantially damaged when it impacted trees near Stroudsburg-Pocono Airport (N53), East Stroudsburg, Pennsylvania. The certificated private pilot was seriously injured. Night visual meteorological conditions prevailed and no flight plan was filed for the personal flight conducted under 14 Code of Federal Regulations Part 91.

According to the pilot, he was returning to N53 after conducting stop and go landings at two other airports in order to meet the night aeronautical experience requirements for a commercial pilot certificate. He could not however, remember the circumstances surrounding the accident with the exception of "hitting the trees."

According to Federal Aviation Administration (FAA), air traffic control facility records the airplane departed N53 and performed stop and go landings at Wilkes-Barre/Scranton International Airport (AVP), Scranton, Pennsylvania and Lehigh Valley International Airport (ABE), Allentown, Pennsylvania before returning to N53.

According to another pilot, who entered the traffic pattern the same time the accident pilot did on his return to N53, the accident pilot transmitted that he was turning on to the left base leg of the traffic pattern for runway 8. No further transmissions were heard.

A witness, who observed the airplane moments before the accident, stated that the airplane was "just above the trees" before it passed over his house turning to the left. It then sounded like the "engine turned off and it crashed."

Another witness reported that she heard a "thump," and looked out the window of her house, but could not see anything. Approximately 10-minutes later she heard a helicopter and saw searchlights. After instructing her husband to call "911," she ventured approximately 300 feet into the woods, and discovered the wreckage of the airplane. The airplane's interior lights were still illuminated, and she discovered the pilot lying near the fuselage. She did not smell any gasoline and believed there was no danger of fire so she did not attempt to move him away from the wreckage.

PERSONNEL INFORMATION

According to FAA records, the pilot held a private pilot certificate, with ratings, for airplane single-engine land, and instrument airplane. He reported a total flight experience of 520 hours. His most recent FAA second-class medical certificate was issued on December 22, 2006.

AIRCRAFT INFORMATION

According to FAA and maintenance records, the airplane was manufactured in 1968. The airplane's most recent annual inspection was completed on December 15, 2006. At the time of the inspection, the airplane had accrued 4,734.57 total hours of operation.

METEOROLOGICAL INFORMATION

A weather observation taken 3 minutes after the accident, at Pocono Mountains Municipal Airport (MPO), Mount Pocono, Pennsylvania, located approximately 12 nautical miles northwest of the accident site, included: variable winds at 3 knots, visibility 10 miles, scattered clouds at 9,000 feet, overcast ceiling at 12,000 feet, temperature 22 degrees Celsius, dew point 16 degrees Celsius, and an altimeter setting of 29.92 inches of mercury.

WRECKAGE AND IMPACT INFORMATION

No evidence of any preimpact malfunction of the airplane or engine was discovered.

Examination of the accident site and wreckage by an FAA inspector revealed, that the airplane had come to rest on its left side. The left wing had separated from its attachment fittings and was found leading edge down leaning against a tree. Approximately 6 inches of fuel was discovered in the forward portion of the tank. The right wing remained attached at its fittings, and its fuel tank was breached. It was void of fuel. No fuel staining was observed on the ground surrounding the tank, and no smell of fuel was detected on site. The fuel selector was in the left tank position. The Flap extension handle was in the 40-degree position. Control continuity was confirmed from the stabilator, rudder, and right aileron to the pitch, yaw and roll control mechanisms in the cabin. Control continuity for the left aileron was confirmed to the breaks in the actuating cables, which exhibited evidence of tensile overload and corresponded to the point of separation of the wing at the wing root.

Examination of the engine revealed, that the engine was still attached to its mounts and the firewall. The cowling was crumpled but remained in place. The propeller and spinner were also in place and remained attached to the engine. Both propeller blade tips were bent and had large nicks in them. One blade had chordwise scratches across most of the leading edge. Neither blade displayed significant bending or twisting.

The engine was found to have incurred impact damage to the No. 2 cylinder head area. The top spark plug was broken away, and the helicoil threads from the cylinder were pulled out. The bottom spark plug remained in place, however the ignition lead was separated. The top left area of the cylinder head where the rocker box cover attached was also broken away. The intake pushrod housing was crushed. The intake tube was in place and crushed. The oil return line and primer line had separated and were also crushed. The exhaust system was damaged, and both ends had separated from the muffler.

All cylinders were inspected with a lighted borescope and no discrepancies were noted. The engine drive train was rotated through the vacuum pump accessory drive and was found to rotate freely and completely in both directions. Continuity was confirmed to all rocker arms and aft gears. Thumb compression was confirmed on all cylinders. Magneto to engine timing was confirmed and during rotation of the drive train, the left magneto impulse coupling could be heard to click. Spark was confirmed from all leads to the left magneto. The right magneto was rotated by hand. It also produced spark at all ignition leads.

TESTS AND RESEARCH

According to a witness, the airplane had already been flown by the pilot earlier in the day.

A query of fuel providers at surrounding airports revealed that the airplane had been refueled sometime prior to 1440 on the day of the accident at ABE and that the fuel tanks had been filled to maximum capacity at that time.

Pilot Information

Certificate:	Private	Age:	71,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	December 22, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 1, 2006
Flight Time:	560 hours (Total, all aircraft), 250 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7389J
Model/Series:	PA-28-140	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28-24751
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	December 15, 2006 Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4734.57 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-E2A
Registered Owner:	On file	Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	MPO, 1916 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	22:53 Local	Direction from Accident Site:	315°
Lowest Cloud Condition:	Scattered / 9000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 12000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	22°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Allentown, PA (ABE)	Type of Flight Plan Filed:	None
Destination:	E.Stroudsburg, PA (N53)	Type of Clearance:	None
Departure Time:	22:11 Local	Type of Airspace:	

Airport Information

Airport:	Stroudsburg-Pocono Airport N53	Runway Surface Type:	Asphalt
Airport Elevation:	480 ft msl	Runway Surface Condition:	Dry
Runway Used:	08	IFR Approach:	None
Runway Length/Width:	3087 ft / 30 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	41.04,-75.173332

Administrative Information

Investigator In Charge (IIC): Gunther, Todd

Additional Participating Persons: Tom Lahovski; FAA/FSDO; Allentown, PA
George Hollingsworth; Piper Aircraft Inc.; Vero Beach, FL
Greg Erikson; Textron Lycoming; Williamsport, PA

Report Date: December 8, 2008

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=66215>

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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](#).