



# Aviation Investigation Factual Report

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<b>Location:</b>	Smoketown, Pennsylvania	<b>Accident Number:</b>	NYC06LA064
<b>Date &amp; Time:</b>	January 28, 2006, 17:45 Local	<b>Registration:</b>	N9183Y
<b>Aircraft:</b>	Piper PA-28-161	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 1 Minor, 2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Factual Information

On January 28, 2006, at 1745 eastern standard time, a Piper PA-28-161, N9183Y, was substantially damaged when it impacted a barn during a forced landing in Smoketown, Pennsylvania. The certificated private pilot received minor injuries, one passenger received serious injuries, and two other passengers were not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the flight that originated at the Cape May County Airport (WWD), Wildwood, New Jersey. The personal flight was conducted under 14 CFR Part 91.

According to the pilot, the flight originated at Lancaster Airport (LNS), Lancaster, Pennsylvania, at 1415. The pilot stated he departed with full fuel in the left tank and the right fuel tank was 3/4 full. He flew to Cape May, with the left fuel tank selected, arriving approximately 1545. He then departed Cape May at 1630, for the return flight to Lancaster. About 90 minutes later, at an altitude of 4,500 feet, the airplane's engine lost power. The pilot applied carburetor heat and switched the fuel selector to the right tank; however, the engine did not restart. He realized he would not be able to make it to Lancaster, and diverted to the Smoketown Airport (S37), Smoketown, Pennsylvania. Shortly thereafter, he realized he would not make it to Smoketown Airport, and prepared for a forced landing in a field. During the landing approach, the airplane impacted a barn.

A Federal Aviation Administration (FAA) inspector examined the airplane and engine after the accident. According to the inspector, the airplane's left and right wings were separated from the airplane and both fuel tanks were ruptured. The engine crankshaft was rotated by hand, and compression and valve train continuity was confirmed to all cylinders. Approximately 1 teaspoon of fuel was observed in the engine-driven fuel pump, and approximately 2 ounces of fuel were observed in the carburetor bowl. No fuel was observed in the main fuel line from the firewall to the fuel pump, or the fuel line from the fuel pump to the carburetor.

The data card from the Engine Data Management system, was extracted and sent to the manufacturer for download. Examination of the data correlated with values in the "normal" range for approximately 30 minutes, followed by an interruption of engine power, a momentary restart, and finally a total loss of engine power.

The pilot reported to the FAA inspector that he did not fuel the airplane at Lancaster or Cape May on the day of the accident.

Fuel records and flight logs provided by a fixed base operator at Lancaster indicated that the airplane was last fueled on January 28, 2006, at 1205, with 12.1 gallons of fuel. The airplane was then flown for 1.4 hours, prior to the accident flight.

According to the Piper PA-28-161 Pilot Operating Handbook, the airplane consumed approximately 8.5 gallons per hour at a 75 percent power setting, when leaned for best economy. The total fuel capacity was 48 useable gallons.

The pilot held a private pilot certificate with a rating for airplane single engine land, and reported 120 hours of total flight experience. His most recent FAA third-class medical certificate was issued on July 14, 2004.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	51, 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>	
<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 With waivers/limitations	<b>Last FAA Medical Exam:</b>	July 1, 2004
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	August 1, 2005
<b>Flight Time:</b>	120 hours (Total, all aircraft), 2 hours (Total, this make and model), 55 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N9183Y
<b>Model/Series:</b>	PA-28-161	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	288616016
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	December 1, 2005 100 hour	<b>Certified Max Gross Wt.:</b>	2447 lbs
<b>Time Since Last Inspection:</b>	72 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5003 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-360
<b>Registered Owner:</b>	Murphy Air LLC	<b>Rated Power:</b>	160 Horsepower
<b>Operator:</b>	Advantage Aero Inc.	<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>	Dusk
<b>Observation Facility, Elevation:</b>	LNS,403 ft msl	<b>Distance from Accident Site:</b>	6 Nautical Miles
<b>Observation Time:</b>	17:53 Local	<b>Direction from Accident Site:</b>	320°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	240°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.17 inches Hg	<b>Temperature/Dew Point:</b>	10°C / -3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Wildwood, NJ (WWD )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Lancaster, PA (LNS )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:30 Local	<b>Type of Airspace:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Serious, 2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 1 Minor, 2 None	<b>Latitude, Longitude:</b>	39.906112,-76.149444

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Andrews, Jill
<b>Additional Participating Persons:</b>	Bob Stoll; FAA/FSDO; Harrisburg, PA Aaron Spotts; Lycoming Engines; Williamsport, PA
<b>Report Date:</b>	July 3, 2006
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=63162">https://data.ntsb.gov/Docket?ProjectID=63162</a>

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](#).