



Aviation Investigation Final Report

Location:	Phillipsburg, Pennsylvania	Accident Number:	NYC04LA187
Date & Time:	August 3, 2004, 17:45 Local	Registration:	N6311P
Aircraft:	Piper PA-24-180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After completing the warm-up and ground checks, the airplane departed from a 5,711-foot-long, 100-foot-wide, asphalt runway. During the initial climb, about 400 feet above the ground, the engine lost partial power, and the airplane began to descend. Suspecting that carburetor icing was present, the pilot applied carburetor heat. A few seconds later, the airplane impacted the ground, coming to rest about 1/4-mile from the end of the runway. The pilot additionally stated that he had experienced a similar problem with the engine losing partial power a few flights prior to the accident; however, it was an isolated event, and he attributed it to possibly being carburetor icing. The engine was test ran by a Federal Aviation Administration inspector after the accident, with no abnormalities noted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of partial engine power for undetermined reasons.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Findings

2. TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

On August 3, 2004, at 1745 eastern daylight time, a Piper PA-24-180, N6311P, was substantially damaged during a forced landing after departing from the Mid-State Airport (PSB), Phillipsburg, Pennsylvania. The certificated private pilot and two passengers were not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the local personal flight conducted under 14 CFR Part 91.

According to the pilot, the accident flight was the first flight of the day and the fuel tanks were full. After completing the warm-up and ground checks, the airplane departed from runway 34, a 5,711-foot-long, 100-foot-wide, asphalt runway. During the initial climb, about 400 feet above the ground, the engine lost partial power, and the airplane began to descend. Suspecting that carburetor icing was present, the pilot applied carburetor heat. A few seconds later, the airplane impacted the ground. The airplane came to rest about 1/4-mile from the end of the runway.

The pilot additionally stated that he had experienced a similar problem with the engine losing partial power a few flights prior to the accident; however, it was an isolated event, and he attributed it to possibly being carburetor icing.

A Federal Aviation Administration (FAA) inspector examined the wreckage after the accident. He observed substantial damage to both wings, and the forward fuselage. The inspector did not observe any anomalies with the flight or engine controls. The engine was test run by the FAA inspector after the accident, with no abnormalities noted.

The weather reported at the airport, at 1755, included winds from 240 degrees at 4 knots, clear skies, a temperature of 81 degrees Fahrenheit, a dew point of 75 degrees Fahrenheit, and an altimeter setting of 29.91 inches Hg.

The density altitude calculated for the time of the accident was approximately 3,749 feet.

A review of a FAA carburetor icing probability chart placed the reported temperature and dew point in the "serious icing at glide power" area of the chart.

According to documents obtained during the investigation, a weight and balance was calculated for the flight, which estimated the aircraft weight as approximately 2,521 pounds.

According to the PA-24-180 Owner's Handbook, the maximum gross weight was 2,550 pounds.

Pilot Information

Certificate:	Private	Age:	36, Male
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 FAA Medical Exam:	October 1, 2003
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	May 1, 2004
Flight Time:	120 hours (Total, all aircraft), 80 hours (Total, this make and model), 41 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N6311P
Model/Series:	PA-24-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-1421
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 1, 2004 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	50 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6000 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360
Registered Owner:	Michael T. Brobeck	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PSB,1948 ft msl	Distance from Accident Site:	
Observation Time:	17:55 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 4400 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.9 inches Hg	Temperature/Dew Point:	27°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Phillipsburg, PA (PSB)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:15 Local	Type of Airspace:	

Airport Information

Airport:	Mid-State Airport PSB	Runway Surface Type:	Asphalt
Airport Elevation:	1948 ft msl	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	None
Runway Length/Width:	5711 ft / 100 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	40.884166,-78.087219

Administrative Information

Investigator In Charge (IIC):	Demko, Stephen
Additional Participating Persons:	Rick Thomas; FAA; Harrisburg, PA
Original Publish Date:	March 28, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=59860

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](#).