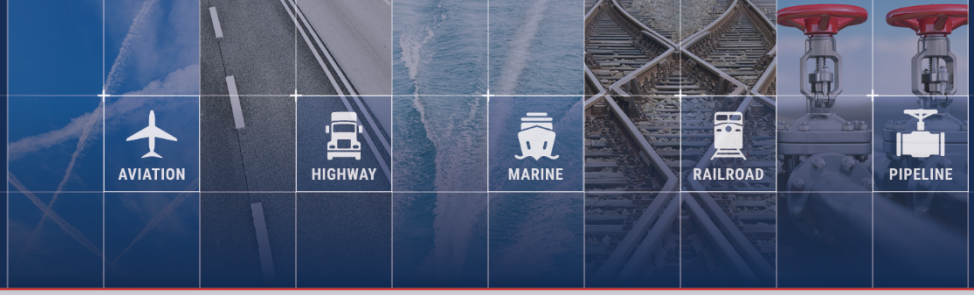

Aviation Investigation Final Report

Location:	Yonkers, New York	**Accident Number:**	ERA13LA121
Date & Time:	January 27, 2013, 17:30 Local	**Registration:**	N1967E
Aircraft:	Piper PA-32-260	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (partial)	**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was performing a personal sightseeing flight over the Hudson River at 1,200 feet above mean sea level. She reported the airplane contained 74 gallons of fuel at takeoff. While abeam a tower, the engine began to partially lose power. The pilot initiated the emergency procedures in the checklist and applied carburetor heat. Engine performance worsened and the carburetor heat was left on for about 15 seconds. She then turned off the carburetor heat and engine performance improved. After about 20 seconds, the engine began to lose power again. Unable to maintain altitude, she made a mayday call and performed a forced landing on the river. The engine and airframe were inspected after the airplane was recovered from the river. The engine ingested a significant amount of mud and debris and many engine components were corroded. No evidence of preaccident mechanical malfunction or failure was found with the engine, ignition system, or carburetor that would have precluded normal operation. Damage from prolonged water submersion prevented a test run of the engine. The airplane was not being operated in weather conditions conducive to carburetor icing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A partial loss of engine power for reasons that could not be determined because examination of the engine and associated components did not reveal any mechanical malfunction or failure that would have precluded normal operation.

Findings

Not determined	(general) - Unknown/Not determined

Factual Information

History of Flight

Enroute-cruise	Loss of engine power (partial) (Defining event)
Emergency descent	Off-field or emergency landing
Emergency descent	Ditching

On January 27, 2013, about 1730 eastern standard time, a Piper PA-32-260, N1967E, was substantially damaged following a partial loss of engine power and forced landing near Yonkers, New York. The commercial pilot and one passenger were not injured. The airplane was operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed and a visual flight rules flight plan was filed. The local flight originated at Old Bridge Airport (3N6), Old Bridge, New Jersey, about 1630.

The pilot reported that she was conducting a personal sightseeing flight over the Hudson River at 1,200 feet mean sea level (msl). She reported the airplane contained 74 gallons of fuel at takeoff. As the aircraft was abeam the Alpine Tower, near Alpine, New Jersey, the engine started to “stutter.” She initiated the emergency procedures in the checklist and applied carburetor heat. Engine performance worsened and the carburetor heat was left on for about 15 seconds. She then turned off the carburetor heat and engine performance improved. She climbed the airplane to 1,200 feet, and after about 20 seconds, the engine began to stutter again. Unable to maintain altitude, she made a mayday call and prepared for a forced landing on the river. The airplane touched down smoothly on the surface of the water. The pilot and passenger exited the airplane and were rescued by first responders.

The wreckage was recovered from the river bottom on February 7, 2013. The upper portion of the rudder and the nose landing gear were bent.

The wreckage was recovered to a storage facility at Clayton, Delaware, where a detailed examination of the airframe and engine was performed. The fuel selector handle was in the “left main” tank position. The magneto switch was in the “both” position. All engine controls were in the “full forward” positions. The carburetor heat was found in the “cold” position and functioned normally when tested.

Engine compression and suction were observed on all cylinders when the engine was rotated manually. The top of the engine was covered with mud. All of the ignition leads were removed and tested; the leads to the numbers 2 and 4 top spark plugs produced a spark when the crankshaft was rotated manually. No other leads would produce a spark. The top spark plugs were removed for inspection; the leads were covered with deposits and corrosion. The carburetor fuel inlet screen was removed and inspected; it contained a sand-like substance on

the surface. The carburetor venturi was intact; however, it was lightly coated with mud and debris.

A review of the Federal Aviation Administration (FAA) Special Airworthiness Information Bulletin, CE-09-35, dated June 30, 2009, revealed that the temperature and dew point at the nearest weather reporting station were not conducive to carburetor icing.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	39,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 With waivers/limitations	**Last FAA Medical Exam:**	September 10, 2012
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	1380 hours (Total, all aircraft), 25 hours (Total, this make and model), 923 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N1967E
Model/Series:	PA-32-260	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	32-920
Landing Gear Type:	Tricycle	**Seats:**	6
Date/Type of Last Inspection:	January 19, 2013 Annual	**Certified Max Gross Wt.:**	3400 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	4600 Hrs as of last inspection	**Engine Manufacturer:**	LYCOMING
ELT:	Installed, not activated	**Engine Model/Series:**	GO-435C&D SER
Registered Owner:	Deniece de Preister	**Rated Power:**	260 Horsepower
Operator:	Deniece de Preister	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night/dark
Observation Facility, Elevation:	TEB,9 ft msl	**Distance from Accident Site:**	9 Nautical Miles
Observation Time:	17:51 Local	**Direction from Accident Site:**	230°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	290°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.48 inches Hg	**Temperature/Dew Point:**	-1°C / -14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Old Bridge, NJ (3N6)	**Type of Flight Plan Filed:**	VFR
Destination:	Old Bridge, NJ (3N6)	**Type of Clearance:**	VFR
Departure Time:	16:30 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	40.956665,-73.901664(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	James Moran; FAA/FSDO; Farmingdale, NY
Original Publish Date:	August 7, 2013
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=86092