Aviation Investigation Final Report

Location:	Tompkins, New York	**Accident Number:**	ERA15LA029
Date & Time:	October 25, 2014, 13:30 Local	**Registration:**	N8064Y
Aircraft:	Piper PA 22-150	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot/owner had not flown the airplane for several months, but he had recently completed several high-speed taxis in the airplane. Before the accident flight, he completed a preflight inspection, which included checking the fuel for water. The preflight inspection and engine run-up did not reveal any anomalies. During takeoff, about 300 ft above ground level and 100 ft beyond the end of the runway, the engine lost and regained power about three times. The pilot applied carburetor heat, but the engine then lost all power. The airplane was too low to return to the airport, so the pilot conducted a forced landing to a road, and the left wing struck a tree. The pilot added that the airplane departed with 25 gallons of automobile gasoline onboard and that there were no mechanical malfunctions with the airplane before the power loss.

After the accident, on-scene responders confirmed there was adequate fuel onboard the airplane, then the pilot removed the wings and transported the airplane back to his residence where it was examined 2 days later. Due to the fuselage damage and disposition of the wreckage, the propeller could not be rotated; however, the engine did not exhibit evidence of catastrophic failure. The fuel could not be checked for contamination because the gascolator had fractured during impact and the pilot had defueled the airplane and disposed of the fuel before transporting it. The airplane had been operated about 17 hours since its most recent annual inspection, which was completed about 4 years before the accident; thus, the airplane was about 3 years overdue for an annual inspection. Although the temperature and dew point at the time of the accident were conducive to the accumulation of serious icing at glide power, the engine was at takeoff power when the power loss occurred.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A total loss of engine power for reasons that could not be determined during postaccident examinations and testing.

Findings

Not determined	(general) - Unknown/Not determined
Personnel issues	Scheduled/routine inspection - Pilot

Factual Information

History of Flight

Initial climb	Loss of engine power (total) (Defining event)
Emergency descent	Off-field or emergency landing
Emergency descent	Collision with terr/obj (non-CFIT)

On October 25, 2014, about 1330 eastern daylight time, a Piper PA-22-150, N8064Y, operated by a private individual, was substantially damaged during a forced landing to a road in Tompkins, New York, following a total loss of engine power during initial climb from White Birch Field (NK68), Hancock, New York. The private pilot incurred minor injuries. The personal flight was conducted under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no flight plan was filed for the local flight.

The pilot owned the airplane and reported that although he had not flown the airplane for several months, he had recently completely several high speed taxis in the airplane. Prior to the accident flight, he completed a preflight inspection of the airplane, which included checking the fuel for water. The preflight inspection and engine run-up did not reveal any anomalies. The pilot intended to takeoff and remain in the airport traffic pattern for landing. During takeoff, about 300 feet above ground level and 100 feet beyond the end of the 1,910-foot long turf runway, the engine lost and regained power about three times. The pilot applied carburetor heat, but the engine then lost all power. The airplane was too low to attempt a return to the airport and the left wing subsequently struck a tree during an attempted forced landing to a road. The pilot added that he departed with 25 gallons of automobile gasoline and that there were no preimpact mechanical malfunctions with the airplane prior to the power loss.

According to a Federal Aviation Administration (FAA) inspector, the airplane was not insured. The New York State Police responded to the accident site and confirmed adequate fuel onboard, before allowing the pilot to remove the wings and transport the airplane back to his residence. The inspector examined the wreckage at the residence 2 days after the accident. The examination revealed damage to the wings and forward fuselage. Due to the fuselage damage and disposition of the wreckage, the inspector was not able to rotate the propeller. He was also unable to check the fuel for contamination as the gascolator had fractured during impact and the pilot had defueled the airplane and disposed of the fuel before transporting it. The engine did not exhibit any evidence of catastrophic failure.

The four-seat, high-wing, fixed-tricycle-gear airplane, serial number 22-7436, was manufactured in 1960. It was powered by a Lycoming O-320, 150-horsepower engine, equipped with a Sensenich two-blade fixed-pitch propeller. The airplane's most recent annual inspection was completed on November 3, 2010. At that time, the airplane had accumulated 2,276.7 total hours of operation. The engine had accumulated 607.19 hours since overhaul. The airplane had flown about 17 hours during the approximate 4-year period from the time of the last annual inspection, until the accident.

Review of an FAA Carburetor Icing chart for the temperature (61 degrees F) and dew point (45 degrees F) at the time of the accident revealed "Serious Icing (glide power);" however, the engine was at takeoff power when the power loss occurred.

Pilot Information

Certificate:	Private	**Age:**	81
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	September 18, 2012
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	August 4, 2009
Flight Time:	800 hours (Total, all aircraft), 100 hours (Total, this make and model), 0 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N8064Y
Model/Series:	PA 22-150	**Aircraft Category:**	Airplane
Year of Manufacture:	1960	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	22-7436
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	November 3, 2010 Annual	**Certified Max Gross Wt.:**	2000 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	2277 Hrs as of last inspection	**Engine Manufacturer:**	
ELT:		**Engine Model/Series:**	
Registered Owner:	HUNTER ALFRED J	**Rated Power:**	
Operator:	HUNTER ALFRED J	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	BGM,1636 ft msl	**Distance from Accident Site:**	20 Nautical Miles
Observation Time:	13:53 Local	**Direction from Accident Site:**	300°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	12 knots / 19 knots	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	240°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.7 inches Hg	**Temperature/Dew Point:**	16°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hancock, NY (NK68)	**Type of Flight Plan Filed:**	None
Destination:	Hancock, NY (NK68)	**Type of Clearance:**	None
Departure Time:	13:30 Local	**Type of Airspace:**	

Airport Information

Airport:	White Birch Field NK68	**Runway Surface Type:**	Grass/turf
Airport Elevation:	1860 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	35	**IFR Approach:**	None
Runway Length/Width:	1910 ft / 70 ft	**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor	**Latitude, Longitude:**	42.049999,-75.33889(est)

Administrative Information

Investigator In Charge (IIC):	Gretz, Robert
Additional Participating Persons:	John Machemer; FAA/FSDO; Albany, NY
Original Publish Date:	March 17, 2015
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=90305