



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Hartford, Connecticut	Accident Number:	WPR18LA173
Date & Time:	June 16, 2018, 13:15 Local	Registration:	N1782J
Aircraft:	Piper PA 28-140	Aircraft Damage:	Substantial
Defining Event:	Landing area overshoot	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that after takeoff, the engine lost partial power, and the airplane would not maintain altitude. The pilot initiated a forced landing to a runway at a nearby closed airport. During the descent, the pilot verified the mixture was full rich and the carburetor heat was off, and he switched fuel tanks. The pilot said the engine did not respond, so he turned it off and executed a "forward slip" and S-turns to position the airplane onto the runway; however, the airplane landed about 600 ft from the departure end of the runway, overran the end of the runway, and struck a fence which resulted in substantial damage to the wings and fuselage. The pilot reported he believed that the recently replaced fuel selector valve failed and starved the engine of fuel.

Postaccident examination of the airplane and an engine test run did not reveal any anomalies with the engine, fuel system or the fuel selector valve that would have precluded normal operation. Thus, the reason for the loss of engine power could not be determined.

Probable Cause and Findings

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

A loss of engine power for undetermined reasons because postaccident examination of the engine and fuel system did not reveal any anomalies that would have precluded normal operation, which led to the pilot's forced landing and subsequent runway overshoot and collision with a fence.

Findings

Not determined	(general) - Unknown/Not determined
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Factual Information

History of Flight

Emergency descent	Loss of engine power (partial)
Landing	Landing area overshoot (Defining event)

On June 16, 2018, about 1315 eastern daylight time, a Piper PA-28-140 airplane, N1782J, was substantially damaged when it was involved in an accident near East Hartford, Connecticut. The pilot and passenger were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The flight departed Hartford-Brainard Airport (HFD), Hartford, Connecticut. The pilot stated that after takeoff, when the airplane was about 900 ft above ground level, the engine started to sputter and lost partial power, and the airplane would not maintain altitude. He decided to conduct a forced landing on a runway at a nearby closed airport. During the descent, the pilot verified the mixture was full rich and the carburetor heat was off, and he switched fuel tanks. The pilot said the engine did not respond, so he turned it off and executed a "forward slip" and S-turns to position the airplane onto the runway; however, the airplane landed about 600 ft from the departure end of the runway, overran the end of the runway, and struck a fence. The pilot reported he believed that the recently replaced fuel selector valve failed and starved the engine of fuel.

The airplane sustained substantial damage to both wings and the fuselage. An on-site examination revealed that the airplane was not leaking fuel, and fuel was present in each wing tank. The fuel drained from the tanks had no evidence of contamination.

An engine test run revealed that the engine ran with no defects noted in the following scenarios: on the right fuel selector position to full power, on the left fuel selector position to full power, in both fuel selector positions to full power with the fuel boost pump turned off, with both magnetos selected, and with left and right magnetos individually selected. No hesitation or loss of power was observed. Fuel that was recovered from the airplane's wing fuel tanks was used for the engine test run.

At 16:53, the recorded weather conditions at HFD were as follows: wind from 010° at 8 knots, visibility 10 statute miles, clear, temperature 28°C, dew point 9°C, and altimeter 29.97 inches of mercury. Weather conditions about the time of the accident were plotted using the chart in Federal Aviation Administration Special Airworthiness Information Bulletin CE-09-35 regarding carburetor ice prevention; the weather conditions (ambient temperature of 28°C and dew point of 9°C) were conducive to serious carburetor icing at glide power.

Pilot Information

Certificate:	Private	Age:	34, Male
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:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	June 30, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 17, 2017
Flight Time:	(Estimated) 130 hours (Total, all aircraft), 65 hours (Total, this make and model), 97 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N1782J
Model/Series:	PA 28-140	Aircraft Category:	Airplane
Year of Manufacture:	1968	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28-24205
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	April 11, 2018 Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3115 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, not activated	Engine Model/Series:	O-320-E3D
Registered Owner:		Rated Power:	160 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	18 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	13:00 Local	Direction from Accident Site:	238°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	28°C / 9°C
Precipitation and Obscuration:			
Departure Point:	Hartford, CT (KHFD)	Type of Flight Plan Filed:	None
Destination:	New Bedford, CT (KEWB)	Type of Clearance:	VFR
Departure Time:	13:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	Hartford-Brainard HFD	Runway Surface Type:	Asphalt
Airport Elevation:	18 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

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:	41.745555,-72.627777(est)

Administrative Information

Investigator In Charge (IIC):	Salazar, Fabian		
Additional Participating Persons:	John Callahan; Bradley Flight Standards District Office; Enfield, CT		
Original Publish Date:	May 25, 2021	Investigation Class:	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97518		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).