



National Transportation Safety Board Aviation Accident Final Report

Location:	Neillsville, WI	Accident Number:	CEN15LA217
Date & Time:	05/02/2015, 0900 CDT	Registration:	N8558G
Aircraft:	CESSNA 150F	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (partial)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The private pilot reported that the engine start and run-up were normal. About 20 minutes after takeoff for the personal cross-country flight, the engine power decreased to idle. The pilot applied the carburetor heat, and the engine regained cruise power. About 2 minutes later, he turned the carburetor heat off. The engine continued to produce cruise power for about 4 minutes before it again decreased to idle. The pilot reapplied carburetor heat, and the engine power increased for about 1 minute before dropping back to idle. The pilot cycled the carburetor heat and verified the position of the engine and fuel controls, but he was unable to regain engine power. The airplane contacted trees shortly after touching down in a field.

A postaccident examination of the airplane and engine did not reveal any mechanical failures or malfunctions that would have precluded normal operation. Although the weather conditions were conducive for the formation of carburetor ice at glide power settings, the engine was set at cruise power when the initial loss of engine power occurred, and the application of carburetor heat did not regain the engine power. The airplane departed with about 10 gallons of fuel onboard. The flight lasted about 40 minutes, and the airplane consumes about 6 gallons per hour, which would have left about 6 gallons of fuel on board at the time of the accident, 3.5 gallons of which were unusable. The postaccident examination revealed that fuel was onboard the airplane. The investigation could not determine the reason for the loss of engine power.

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 a postaccident examination of the airframe and engine did not reveal any anomalies that would have precluded normal operation.

Findings

Environmental issues	Tree(s) - Contributed to outcome
Not determined	Not determined - Unknown/Not determined (Cause)

Factual Information

On May 2, 2015, at 0900 central daylight time, a Cessna 150F, N8558G, collided with trees during an off airport forced landing in Neillsville, Wisconsin, following a loss of engine power. The private pilot, sole occupant, received minor injuries. The airplane was substantially damaged. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, which was not operated on a flight plan. The flight originated from the Wausau Downtown Airport (AUW), Wausau, Wisconsin about 0820. The intended destination was the Neillsville Municipal Airport (VIQ), Neillsville, Wisconsin.

The pilot reported that the engine start and run-up were normal. He sat on the ground waiting for other aircraft traffic to clear then he taxied and took off without incident. About 20 minutes after takeoff, the engine power decreased to idle in about 1 second. The pilot applied the carburetor heat and the engine regained cruise power. About two minutes later, he turned the carburetor heat off. The engine continued to produce cruise power for about four minutes when it once again decreased to idle. He once again applied carburetor heat and the engine power momentarily increased to full power before dropping back to idle. The pilot cycled the carburetor heat, and verified the position of the throttle, magnetos, fuel selector, engine primer, and mixture with no change in the engine power from idle.

The pilot located a field which contained downward sloping terrain in which to land. The pilot cleared power lines that bordered the field. The airplane floated in ground effect and it came to an abrupt stop up against trees shortly after the main gear touched down.

A postaccident inspection of the airframe and engine by a Federal Aviation Administration airworthiness inspector did not reveal any mechanical failure/malfunction that would have prevented normal operation. The left fuel tank contained about 1/4 tank of fuel and the right tank contained about 1/8 tank of fuel when the airplane was first examined after the accident. The FAA inspector stated the fuel system was intact.

The pilot stated that there was a strong odor of fuel in the area after the accident. The airplane held 26 gallons of fuel with 3.5 gallons being unusable. The pilot reported he departed with about 10 gallons of fuel on board. The fuel consumption for the airplane is about 6 gallons per hour.

The temperature and dewpoint reported at the Marshfield Municipal Airport (MFI), Marshfield, Wisconsin, located about 3 miles from the accident site at 0854 were 17 degrees Celsius (63 Fahrenheit) and 4 degrees Celsius (39 Fahrenheit) respectively. According to the FAA SAIB CE-09-35 "Carburetor Icing Prevention" chart, serious icing at glide power was a probability. A risk of carburetor icing at cruise power was not probable according to the bulletin.

History of Flight

Enroute-cruise	Loss of engine power (partial) (Defining event)
Landing-landing roll	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	50, 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 With Waivers/Limitations	Last Medical Exam:	11/25/2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	07/21/2014
Flight Time:	475 hours (Total, all aircraft), 370 hours (Total, this make and model), 475 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N8558G
Model/Series:	150F	Aircraft Category:	Airplane
Year of Manufacture:	1966	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	15062658
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	07/21/2014, Annual	Certified Max Gross Wt.:	1601 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	7391 Hours	Engine Manufacturer:	CONT MOTOR
ELT:	Not installed	Engine Model/Series:	O-200
Registered Owner:	On file	Rated Power:	100 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	MFI, 1278 ft msl	Observation Time:	0854 CST
Distance from Accident Site:	3 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	230°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	17° C / 4° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	10 knots, 240°	Visibility (RVR):	
Altimeter Setting:	29.99 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Wausau, WI (AUW)	Type of Flight Plan Filed:	None
Destination:	Neillsville, WI (VIQ)	Type of Clearance:	None
Departure Time:	0820 CDT	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor		

Administrative Information

Investigator In Charge (IIC):	Pamela S Sullivan	Adopted Date:	11/29/2016
Additional Participating Persons:	Mike Batson; FAA; Milwaukee, WI		
Publish Date:	11/29/2016		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=91123		

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