



Aviation Investigation Final Report

Location:	Millersburg, Ohio	Accident Number:	CEN17LA060
Date & Time:	December 21, 2016, 10:20 Local	Registration:	N8381T
Aircraft:	Cessna 175C	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot was conducting a personal cross-country flight. The pilot reported that, after takeoff, he switched to the left fuel tank for the cruise portion of the flight. He added that, about 5 miles from the destination airport, he completed the Before Landing checklist; however, he "failed to position the fuel selector to [the] both" position at that time, which "set the stage for fuel exhaustion." The engine subsequently lost power. He checked the fuel selector, found that it was still set to the left tank, and moved it to the right tank. He subsequently executed a forced landing to an open area at the base of a hill, during which the airplane impacted a fence and sustained substantial damage to the firewall and right wing. The pilot stated that no mechanical malfunctions or failures with the airplane preceded the accident. The pilot's failure to move the fuel selector handle to the "both" position in accordance with the Before Landing checklist resulted in the loss of engine power due to fuel starvation.

Probable Cause and Findings

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

The pilot's improper in-flight fuel management and his failure to switch the fuel selector to the "both" position in accordance with the Before Landing checklist, which resulted in a loss of engine power due to fuel starvation.

Findings

Aircraft	Fuel - Fluid management
Personnel issues	Use of equip/system - Pilot
Personnel issues	Use of checklist - Pilot
Environmental issues	Fence/fence post - Contributed to outcome

Factual Information

History of Flight

Approach-VFR pattern final	Loss of engine power (total) (Defining event)
Emergency descent	Off-field or emergency landing
Landing	Collision with terr/obj (non-CFIT)

On December 21, 2016, about 1020 eastern standard time, a Cessna 175C airplane, N8381T, impacted a fence post and terrain during a forced landing following a loss of engine power on approach to the Holmes County Airport (10G), Millersburg, Ohio. The pilot sustained a minor injury and the passenger was not injured. The airplane was substantially damaged. The airplane was registered to and operated by private individuals 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 Davis Airport (W50), Laytonsville, Maryland, about 0700 and was destined for 10G.

The pilot reported that he conducted a "thorough preflight" inspection before takeoff from W50. The fuel samples drained from the airplane fuel system did not contain any contamination. After takeoff, the pilot switched to the left fuel tank for the cruise portion of the flight. About 5 miles from 10G, he completed the before landing checklist. However, he "failed to position the fuel selector to [the] both" position at that time, which "set the stage for fuel exhaustion." On final approach, about 1/3 of a mile from the runway about 1,600 ft mean sea level, the engine lost power. He checked the fuel selector, found it still set to the left tank and changed it to the right tank. He subsequently executed a forced landing to an open area at the base of a hill. The pilot stated that no mechanical malfunctions or failures preceded the accident.

The airplane came to rest adjacent to a wire mesh fence. The nose landing gear separated, the left main landing gear collapsed, and the engine mount and firewall were deformed during the forced landing. The right wing was partially separated from the fuselage at the aft spar attachment. The right wing also exhibited a leading edge dent consistent with impact to a fence post. The left wing was deformed upward near the wing tip consistent with ground contact due to the collapsed landing gear.

The airplane owner's manual specified that the fuel selector should be set to the "both on" position before landing.

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	62, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Glider	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	February 9, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 26, 2016
Flight Time:	12500 hours (Total, all aircraft), 5481 hours (Total, this make and model), 10737 hours (Pilot In Command, all aircraft), 49 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N8381T
Model/Series:	175C C	Aircraft Category:	Airplane
Year of Manufacture:	1962	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17557081
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	December 28, 2015 Annual	Certified Max Gross Wt.:	2348 lbs
Time Since Last Inspection:	99 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2169 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A3A
Registered Owner:	On file	Rated Power:	180 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:	10G,1227 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	10:25 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.23 inches Hg	Temperature/Dew Point:	-2°C / -5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Laytonsville, MD (W50)	Type of Flight Plan Filed:	None
Destination:	Millersburg, OH (10G)	Type of Clearance:	None
Departure Time:	07:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Holmes County 10G	Runway Surface Type:	Asphalt
Airport Elevation:	1227 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	4400 ft / 75 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	40.536666,-81.955833(est)

Administrative Information

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Vincent A Yerace; FAA Flight Standards; North Olmstead, OH
Original Publish Date:	September 6, 2017
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=94527

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](#).