



National Transportation Safety Board Aviation Accident Final Report

Location:	Fresno, CA	Accident Number:	WPR15LA077
Date & Time:	01/03/2015, 1650 PST	Registration:	N2948U
Aircraft:	CESSNA 172D	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	3 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that, about 3 miles from the destination airport, the engine experienced a loss of power. During the forced landing to a nearby field, the airplane collided with an unseen set of power lines before touching down in the field. Both the left wing and the empennage were substantially damaged. The pilot reported that, when the engine lost power, the left wing fuel gauge was indicating that the tank was empty and the right wing fuel gauge was indicating that the tank was 1/4 to 1/2 full of fuel. Postaccident examination of the airframe revealed that the fuel system was not compromised, and no evidence of fuel was found in the airplane's fuel system. The examination of the engine revealed no mechanical malfunctions or failures that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper fuel planning, which resulted in a loss of engine power due to fuel exhaustion.

Findings

Aircraft	Fuel - Fluid level (Cause) Fuel quantity indicator - Not specified
Personnel issues	Fuel planning - Pilot (Cause)
Environmental issues	Wire - Contributed to outcome

Factual Information

On January 3, 2015, about 1650 Pacific standard time, a Cessna 172D, N2948U, experienced a partial loss of engine power and collided with a power line during a forced landing near Fresno Chandler Municipal Airport, Fresno, California. The private pilot and a passenger were not injured; the airplane sustained substantial damage to the left wing and the tail section. The airplane was registered to an individual and operated by the pilot under the provision of 14 Code of Federal Regulations (CFR) Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, and no flight plan had been filed. The flight originated from Oceano County Airport, Oceano, California at 1600.

The pilot reported that he had flown from Fresno earlier in the day and was on the return trip back from Oceano. About 40 minutes after takeoff, the pilot began the descent toward Fresno Chandler Municipal Airport. During the descent, with the airplane about 3 miles from the runway, the engine experienced a partial loss of power. In response, the pilot set the mixture control to the full rich position and applied carburetor heat. Despite his attempts, the engine power dropped to idle. The engine would momentarily regain power when the pilot manipulated the throttle lever, but the airplane could not maintain altitude. The pilot made a forced landing in a nearby open field. The airplane subsequently impacted an unseen set of power lines before landing in the field. The empennage and the left wing sustained substantial damage.

The pilot stated that at the time of the accident, the fuel gauge in the cockpit indicated that the left wing fuel tank was empty, but the right wing fuel tank had between 1/4 and 1/2 of the fuel quantity in it.

A post accident examination by a Federal Aviation Administration (FAA) inspector was conducted on the engine and the fuel system. Inspection of the fuel strainer revealed no signs of fuel. The main fuel line from the fuel strainer to the carburetor was removed, and no fuel was evident. Both fuel tanks were inspected and no fuel was found.

Examination of the carburetor by the National Transportation Safety Board (NTSB) investigator revealed that the carburetor was intact and undamaged. The throttle control arm was intact and moved from stop to stop by hand. The carburetor was disassembled and examined internally. The accelerator pump functioned normally when the throttle arm was actuated by hand. The metal floats were intact and undamaged. The needle valve and needle valve seat were intact and undamaged. The carburetor float bowl was free of debris. No residual debris was found within the float bowl. No debris was observed within the carburetor mixture metering sleeve.

History of Flight

Enroute-cruise	Loss of engine power (total) (Defining event)
Emergency descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	40
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
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:	12/30/2013
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	326.2 hours (Total, all aircraft), 169 hours (Total, this make and model), 278.5 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N2948U
Model/Series:	172D	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17250548
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	12/19/2014, Annual	Certified Max Gross Wt.:	800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2327 Hours	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-300-D
Registered Owner:	GRAHAM ROBERT A	Rated Power:	145 hp
Operator:	GRAHAM ROBERT A	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:		Observation Time:	
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	14° C
Lowest Ceiling:	None	Visibility	30 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:	30.05 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	OCEANIO, CA (KL52)	Type of Flight Plan Filed:	None
Destination:	FRESNO, CA (KFCH)	Type of Clearance:	VFR Flight Following
Departure Time:	1600 PST	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None		

Administrative Information

Investigator In Charge (IIC):	Maja Smith	Adopted Date:	07/13/2015
Additional Participating Persons:	Mike Coberly; FAA FSDO; Fresno, CA		
Publish Date:	07/13/2015		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=90565		

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