



Aviation Investigation Final Report

Location:	Lewiston, Idaho	Accident Number:	WPR23LA127
Date & Time:	March 11, 2023, 11:15 Local	Registration:	N7010Q
Aircraft:	Cessna 172L	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that, he planned to complete back-to-back flight lessons with two students. His students completed the preflight inspection and each tank measured about half full. The flight instructor verified that the fuel gauges indicated sufficient fuel for both lessons. During the second flight lesson with a student pilot at the controls, the airplane experienced a total loss of engine power. The flight instructor took control of the airplane and force-landed on a golf course. The airplane collided with trees during landing, resulting in substantial damage to the right wing. The flight instructor reported that the airplane ran out of fuel, and that there were no preaccident mechanical failures or malfunctions with the airplane 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 flight instructor's inadequate fuel planning and improper in-flight decision-making, which resulted in a total loss of engine power due to fuel exhaustion.

Findings

Aircraft	Fuel - Fluid level
Personnel issues	Decision making/judgment - Instructor/check pilot
Personnel issues	Fuel planning - Instructor/check pilot

Factual Information

History of Flight

Initial climb	Fuel exhaustion (Defining event)
Emergency descent	Off-field or emergency landing
Emergency descent	Loss of engine power (total)

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	71, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	February 10, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 21, 2022
Flight Time:	4560 hours (Total, all aircraft), 950 hours (Total, this make and model), 4407 hours (Pilot In Command, all aircraft), 108 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	Age:	52, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	December 23, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	13 hours (Total, all aircraft), 13 hours (Total, this make and model), 13 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7010Q
Model/Series:	172L	Aircraft Category:	Airplane
Year of Manufacture:	1971	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17260310
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	October 19, 2022 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	69 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4223 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	O-320-E20
Registered Owner:	MOSMAN MATTHEW J	Rated Power:	150 Horsepower
Operator:	MOSMAN MATTHEW J	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLWS, 1430 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	11:36 Local	Direction from Accident Site:	137°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 4900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	8°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lewiston, ID (KLWS)	Type of Flight Plan Filed:	None
Destination:	Lewiston, ID	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class D

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	46.38359,-117.02753(est)

Administrative Information

Investigator In Charge (IIC): Rho, Paul

Additional Participating Persons: Doug Belcher; FAA; Spokane, WA

Original Publish Date: June 6, 2023

Last Revision Date:

Investigation Class: [Class 4](#)

Note: The NTSB did not travel to the scene of this accident.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=106883>

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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](#).