



Aviation Investigation Final Report

Location:	Wasilla, Alaska	Accident Number:	GAA19CA236
Date & Time:	April 30, 2019, 19:00 Local	Registration:	N3031U
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that, during the preflight inspection, he asked the student pilot, who was the owner of the airplane, how much fuel was onboard the airplane and that the student replied that there was enough fuel for about 3 hours of flight. He added that, during the flight, he became concerned about the fuel level because he saw that the right fuel gauge needle displayed "little movement." After a brief conversation with the student about the fuel burn, the instructor decided to return to the airport.

The student stated that he visually checked the fuel tanks during the preflight and estimated that there was about 1/2 tank (19 gallons), which was enough for about 2.5 hours of flight based on a fuel burn of 7.5 gph. The student reported that, during the flight, the instructor commented that the fuel gauge looked low and that he responded that it was working "intermittently," at which point, the instructor decided to return to the airport.

The student reported that, about 5 nautical miles from the airport, the airplane "ran out of fuel at 3,000 ft MSL [mean sea level]." Subsequently, the instructor landed the airplane on a road, and the right wing struck a power line pole.

The airplane sustained substantial damage to the right wing.

Probable Cause and Findings

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

The flight instructor's failure to verify the fuel level, which resulted in a total loss of engine power due to fuel exhaustion and a subsequent forced landing and collision with a power line pole. Contributing to the accident was the student pilot's inadequate preflight fuel planning.

Findings

Personnel issues	Preflight inspection - Instructor/check pilot
Environmental issues	Pole - Effect on operation
Aircraft	Fuel - Inadequate inspection
Aircraft	Fuel - Fluid level
Personnel issues	Fuel planning - Student/instructed pilot

Factual Information

History of Flight

Enroute-cruise	Fuel exhaustion
Enroute-cruise	Loss of engine power (total) (Defining event)
Landing	Collision with terr/obj (non-CFIT)

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	66,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	May 11, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:			

Student pilot Information

Certificate:	Student	Age:	56,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:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	April 18, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 87 hours (Total, all aircraft), 87 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3031U
Model/Series:	172 E	Aircraft Category:	Airplane
Year of Manufacture:	1963	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17250631
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	August 28, 2018 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2562 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91 installed	Engine Model/Series:	O-360-A1A
Registered Owner:		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:	PAWS, 354 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	00:56 Local	Direction from Accident Site:	238°
Lowest Cloud Condition:	Few / 400 ft AGL	Visibility	8 miles
Lowest Ceiling:	Broken / 6500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.39 inches Hg	Temperature/Dew Point:	11°C / 0°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Wasilla, AK (PAWS)	Type of Flight Plan Filed:	None
Destination:	Wasilla, AK (PAWS)	Type of Clearance:	None
Departure Time:	17:30 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	61.599166,-149.450561(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Thomas Cunningham ; FAA; Anchorage, AK
Original Publish Date:	March 20, 2020
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99356

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