



Aviation Investigation Final Report

Location:	England, Arkansas	Accident Number:	GAA18CA160
Date & Time:	March 7, 2018, 17:00 Local	Registration:	N1889Y
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Fuel contamination	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The student pilot reported that, during the preflight, he and the pilot-rated passenger, who was not a flight instructor, inspected the fuel sumps on each wing and the engine, "pulling [a] sample on each." He added that, during departure from the airstrip, after they became airborne for about 9 seconds, the engine rpm dropped to idle. The propeller was still rotating, but the airplane's engine was not producing power. Subsequently, the airplane landed in a cotton field, the nose landing gear sheared off, and the airplane came to rest nosed over.

The airplane sustained substantial damage to the tail and fuselage.

The student pilot reported that the airplane had gone through a pre-purchase inspection the previous week, and the airplane had accrued little time since the annual, which was 7 months before the accident flight. He added that it seemed like the airplane was starved for fuel.

The Federal Aviation Administration inspector reported finding substantial water in the gascolator.

Probable Cause and Findings

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

The pilot's failure to detect water in the fuel system during the preflight inspection, which resulted in a loss of engine power during departure and a subsequent impact with terrain.

Findings

Personnel issues	Preflight inspection - Pilot
Aircraft	Fuel - Fluid condition

Factual Information

History of Flight

Takeoff	Fuel contamination (Defining event)
Emergency descent	Off-field or emergency landing
Landing-landing roll	Landing gear collapse
Landing-landing roll	Nose over/nose down

Student pilot Information

Certificate:	Student	Age:	49,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 Waiver time limited special	Last FAA Medical Exam:	February 1, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 50 hours (Total, all aircraft), 50 hours (Total, this make and model), 48 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Pilot-rated passenger Information

Certificate:	Commercial	Age:	63,Male
Airplane Rating(s):	Single-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):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	August 9, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 26, 2018
Flight Time:	(Estimated) 957 hours (Total, all aircraft), 107 hours (Total, this make and model), 957 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1889Y
Model/Series:	172 C	Aircraft Category:	Airplane
Year of Manufacture:	1962	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17249489
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	August 8, 2017 Annual	Certified Max Gross Wt.:	2250 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-300-D
Registered Owner:		Rated Power:	145 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:	KSGT, 224 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	22:56 Local	Direction from Accident Site:	65°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.13 inches Hg	Temperature/Dew Point:	11°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	England, AR	Type of Flight Plan Filed:	None
Destination:	England, AR	Type of Clearance:	None
Departure Time:	17:00 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	34.486667,-91.865554(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Matthew Disch; FAA; Lubbock, TX
Original Publish Date:	July 5, 2018
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=96859

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).