



Aviation Investigation Final Report

Location:	Zena, Oklahoma	Accident Number:	CEN22LA343
Date & Time:	July 20, 2022, 23:30 Local	Registration:	N7555N
Aircraft:	Beech E33A	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After about 2.5 hours of cross-country night flight, the engine lost all power near an airport where the pilot planned to refuel. The pilot stated that he thought that he ran out of fuel and executed a forced landing to a vegetated field about 1 mile from the airport. The airplane sustained substantial damage to the left wing and front of the fuselage.

Examination of the airplane did not reveal any mechanical anomalies with the engine that would have precluded normal operation. The left-wing tank was found dry and the right fuel tank was found with about 1 inch of unusable fuel at the accident site. The fuel selector switch was found in the left fuel tank position. The pilot did not know how much fuel was onboard the airplane at the time of departure and had delayed refueling the airplane due to the price of fuel.

Probable Cause and Findings

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

The pilot’s inadequate preflight inspection and fuel planning, and improper in-flight decision making which resulted in a total loss of engine power due to fuel exhaustion.

Findings

Personnel issues	Fuel planning - Pilot
Personnel issues	Decision making/judgment - Pilot
Aircraft	Fuel - Fluid level

Factual Information

History of Flight

Enroute	Fuel exhaustion (Defining event)
Landing-flare/touchdown	Off-field or emergency landing

On July 20, 2022, about 2330 central daylight time, a Beech E33A airplane, N7555N, was substantially damaged when it was involved in an accident near Zena, Oklahoma. The pilot and passenger were not injured. The airplane was operated under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a personal flight.

The pilot reported that he was enroute on a night cross-country flight that originated from Colorado Springs, Colorado. The pilot did not recall how much fuel was onboard the airplane when he departed Colorado Springs. His destination was Siloam Springs, Arkansas. However, he planned to refuel at the South Grand Lake Regional Airport (1K8), Ketchum, Oklahoma, because the fuel was less expensive there than it was at Colorado Springs. After about 2.5 hours of flight, he thought that he was going to run out of fuel. Near his destination, he tried to make the airport, but the engine lost all power. The pilot executed a forced landing to a field about 1 mile from 1K8, which resulted in substantial damage to the left wing and front of the fuselage.

Postaccident examination of the engine did not reveal any mechanical anomalies that would have precluded normal operations. The propeller assembly was turned by hand and normal thumb compression was attained. The spark plugs exhibited normal wear. Engine valve- and drive-train continuity was confirmed to the engine accessory section. The throttle body and mixture control connections and linkages in the cockpit and engine were intact. Flight control continuity was confirmed from the cockpit to the flight control surfaces.

The left wing fuel tank was found dry. About 1 inch of fuel was found in the right wing fuel tank. There appeared to be no leaks from either fuel tanks at the accident site, and no fuel blight was present on the ground. The fuel selector switch was found in the left fuel tank position.

NTSB form 6120 Pilot/Operator reports were not received from the pilot or the owner. The owner of the airplane reported that he had sold the airplane after the accident and could not provide maintenance records.

Pilot Information

Certificate:	Airline transport; Commercial	Age:	47, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	February 1, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 14, 2021
Flight Time:	(Estimated) 11645 hours (Total, all aircraft), 97 hours (Total, this make and model), 212 hours (Last 90 days, all aircraft), 57 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N7555N
Model/Series:	E33A	Aircraft Category:	Airplane
Year of Manufacture:	1968	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	CE-197
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	June 7, 2022 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5975 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520-BA
Registered Owner:	REINHARDT ROBERT F JR	Rated Power:	300 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	KGMJ,833 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	23:35 Local	Direction from Accident Site:	40°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	27°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Colorado Springs, CO (COS)	Type of Flight Plan Filed:	None
Destination:	Siloam Springs, AR (SJG)	Type of Clearance:	None
Departure Time:	21:00 Local	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	36.4962,-94.8536(est)

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	Don Bell; FAA FSDO; Oklahoma City, OK
Original Publish Date:	April 25, 2024
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=105583

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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](#).