



Aviation Investigation Final Report

Location: Hulbert, Oklahoma Accident Number: GAA16CA177

Date & Time: April 5, 2016, 01:00 Local Registration: N5791V

Aircraft: Beech A23 Aircraft Damage: Substantial

Defining Event: Fuel exhaustion **Injuries:** 2 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that about 5 hours into a night cross country flight the engine started running rough. He switched between the left and right fuel tanks several times, adjusted the mixture, but was unsuccessful in correcting the issue. The pilot further reported that he knew that he would not make it to the nearest airport, so he turned on his landing light and looked for a place to land. The pilot landed the airplane in a pond, and came to rest on the shore.

The airplane sustained substantial damage to the fuselage.

A postaccident examination revealed that the right and left fuel tanks were empty.

According to the pilot there were no preimpact mechanical failures or malfunctions with the airframe or engine 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 inadequate fuel planning, which resulted in fuel exhaustion, and collision with terrain.

Findings

Personnel issues Fuel planning - Pilot
Aircraft Fuel - Fluid level

Aircraft Fuel - Fluid management

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Factual Information

History of Flight

Enroute-cruise	Fuel exhaustion (Defining event)	
Landing	Off-field or emergency landing	
Landing	Collision with terr/obj (non-CFIT)	

Pilot Information

Certificate:	Private	Age:	59,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	July 14, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 31, 2014
Flight Time:	(Estimated) 152 hours (Total, all aircraft), 98 hours (Total, this make and model), 124 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

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Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N5791V
Model/Series:	A23 A	Aircraft Category:	Airplane
Year of Manufacture:	1966	Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	M-971
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	December 1, 2015 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4516.24 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	C91 installed	Engine Model/Series:	IO-346-A
Registered Owner:	On file	Rated Power:	165 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:	KTQH,873 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	06:15 Local	Direction from Accident Site:	104°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	13°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	HUNTSVILLE, AL (MDQ)	Type of Flight Plan Filed:	None
Destination:	TULSA, OK (1H6)	Type of Clearance:	VFR
Departure Time:	20:20 Local	Type of Airspace:	Class G

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Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	35.954723,-95.135276(est)

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Administrative Information

Investigator In Charge (IIC):	Vanover, Jackie
Additional Participating Persons:	James Wirt; FAA; Oklahoma City, OK
Original Publish Date:	June 1, 2016
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=92960

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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.

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