



National Transportation Safety Board Aviation Accident Final Report

Location:	Delano, CA	Accident Number:	WPR16LA113
Date & Time:	05/14/2016, 1100 PDT	Registration:	N3724Y
Aircraft:	BEECH C23	Aircraft Damage:	Substantial
Defining Event:	Fuel starvation	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The student pilot was on a multi-leg, solo, cross-country flight. He stated that, while in cruise on the last leg of the flight, the engine began to sputter, so he switched the fuel selector from the right tank position to the left tank position. Shortly after switching fuel tanks, the engine experienced a total loss of power and the student performed a forced landing to an orange orchard. First responders reported that there was no fuel leaking from the airplane, and no fuel was observed in the airplane's fuel tanks.

The student stated that, before the flight, he had filled the fuel tanks to the filler tabs, which equated to 37.4 total gallons of useable fuel. Review of performance information for the airplane revealed that the airplane would have used about 35.4 gallons of fuel at the time of the accident. However, variations in wind or engine power settings may have resulted in a higher fuel consumption on the accident flight.

In a subsequent interview, the student pilot stated that he had exhausted the fuel in the right tank and could not restart the engine before the forced landing.

Probable Cause and Findings

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

The student pilot's inadequate preflight and inflight fuel planning, which resulted in a total loss of engine power due to fuel exhaustion.

Findings

Aircraft

Fuel - Fluid management (Cause)

Personnel issues

Use of equip/system - Student pilot (Cause)

Factual Information

On May 14, 2016, about 1100 Pacific daylight time, a Beechcraft C23 "Sundowner" airplane, N3724Y, sustained substantial damage during a forced landing, following a loss of engine power, in an orange orchard near Delano, California. The student pilot sustained minor injuries. The airplane was owned by a private individual and operated by the student pilot as a personal, cross-country flight under the provisions of Title 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no flight plan had been filed for the flight.

The student pilot stated that he departed from the Bakersfield Municipal Airport (L45), Bakersfield, California, and flew to the west side of the valley practicing maneuvers before flying to Porterville Airport (PTV), Porterville, California, for a quick stop. The pilot then departed PTV, destined to Shafter Airport – Minter Field (MIT), Shafter, California. While en route, in the vicinity of Delano, the pilot stated that the airplane engine began to sputter. He switched the fuel selector from the right tank position to the left tank position. Shortly after he switched fuel tanks, the engine lost total power and he could not get it restarted, so he initiated a forced landing to an orange orchard. During the forced landing the airplane sustained substantial damage to the wings and fuselage.

The pilot stated that he had filled the fuel tanks to the filler tabs, which equates to 37.4 gallons of useable fuel. Review of performance information for the make and model airplane revealed that, based on the reported fuel onboard the airplane at the beginning of the day, the airplane would have used about 35.4 gallons of fuel at the time of the accident.

First responders to the accident scene reported that there was no fuel leaking from the airplane, and no fuel was observed in the airplane fuel tanks.

In a later telephone conversation with the National Transportation Safety Board investigator-in-charge, the pilot stated that he had run the right fuel tank out of fuel and couldn't get the engine primed before the forced landing occurred.

History of Flight

Enroute-cruise	Fuel starvation (Defining event)
Emergency descent	Collision with terr/obj (non-CFIT)

Student Pilot Information

Certificate:	Student	Age:	48, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without Waivers/Limitations	Last FAA Medical Exam:	05/12/2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	61 hours (Total, all aircraft), 61 hours (Total, this make and model), 20 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N3724Y
Model/Series:	C23 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	1980	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	M-2279
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	06/01/2015, Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5725 Hours at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	O&VO-360 SER
Registered Owner:	DAVID ROBERTA L	Rated Power:	180 hp
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KBFL, 492 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	1754 UTC	Direction from Accident Site:	154°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	22° C / 8° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Porterville, CA (PTV)	Type of Flight Plan Filed:	None
Destination:	Shafter, CA (MIT)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	35.722500, -119.227500 (est)

Administrative Information

Investigator In Charge (IIC):	Christopher R Shaver	Report Date:	05/01/2017
Additional Participating Persons:	John Jensen; FAA Fresno FSDO; Fresno, CA		
Publish Date:	05/01/2017		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93215		

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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](#).