



National Transportation Safety Board Aviation Accident Data Summary

Location:	New Braunfels, TX	Accident Number:	CEN14CA227
Date & Time:	05/02/2014, 1700 CDT	Registration:	N7308P
Aircraft:	PIPER PA 24-250	Injuries:	4 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot with three passengers planned to depart and return on a cross-country flight. The pilot stated that the airplane's left fuel tank was filled to an inch below the collar, and the right fuel tank was filled to two inches below the collar. He estimated that the airplane had 40-45 gallons of fuel on board, with a planned en route time of 57 minutes, and about a 10 knot tailwind. Once at a cruise altitude of 7,500 feet, he set the manifold pressure at 21 inches and engine rpm at 2,300 for a fuel burn of 12.3 gallons/hr per the pilot operating handbook. The pilot reported for the return leg he again visually checked the fuel level in each tank. He estimated 12-15 gallons in the left tank and 10 in the right, for a total of 22-25 gallons. The pilot added that fuel burn seemed normal and he decided not to add fuel, he also stated that estimations are not an accurate science and that a fuel stick was not provided to confirm the fuel level. After departing for the return flight, he switched fuel tanks from the left side to the right side. About 15 minutes later, the pilot noticed a reduction in power and switched back to the left side fuel tank. Engine power was restored, and the pilot stated that he did not feel that the fuel had been exhausted from the right side based on his calculations. A few minutes later, the engine lost power and the pilot performed a forced landing to a construction site. A post-crash examination of the airplane revealed substantial damage to the airplane's fuselage and left wing during the forced landing. Additionally, the fuel tanks were empty and were not breached in the accident.

Flight Events

Enroute-cruise - Fuel exhaustion
Emergency descent - Off-field or emergency landing

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power due to fuel exhaustion, which resulted from the pilot's inadequate preflight planning and inflight decision making.

Findings

Aircraft-Fluids/misc hardware-Fluids-Fuel-Fluid level - C
Personnel issues-Task performance-Planning/preparation-Fuel planning-Pilot - C
Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - C

Pilot Information

Certificate:	Private	Age:	48
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	397 hours (Total, all aircraft), 7.6 hours (Total, this make and model), 345 hours (Pilot In Command, all aircraft), 10.4 hours (Last 90 days, all aircraft), 6.2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N7308P
Model/Series:	PA 24-250 250	Engines:	1 Reciprocating
Operator:	Anderson Aviation	Engine Manufacturer:	LYCOMING
Air Carrier Operating Certificate:	None	Engine Model/Series:	0-540 SERIES
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KBAZ	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	Broken / 11000 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	5 knots, 290°
Temperature:	27° C / -1° C	Visibility:	10 Miles
Precipitation and Obscuration:			
Departure Point:	Houston, TX (KDWH)	Destination:	Bulverde, TX (1T8)

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Craig Hatch	Adopted Date:	06/05/2014
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=89160		

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