



National Transportation Safety Board

Aviation Accident Data Summary

Location:	Laguna Pueblo, NM	Accident Number:	CEN16LA112
Date & Time:	02/29/2016, 1325 MST	Registration:	N2711M
Aircraft:	CIRRUS DESIGN CORP SR22	Injuries:	4 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The private pilot and three passengers were on a cross-country flight and stopped en route to refuel. The pilot reported that services were limited and only self-serve fuel pumps were available. The pilot intended to add about 25 gallons of fuel to each wing tank and asked one of the passengers for assistance in reading the fuel meter and reporting the quantity as she added fuel to the airplane. The passenger stated that the sun was shining on the meter, which made it hard to read. She yelled for the pilot to stop refueling when she read 25 gallons on the meter but stated to the pilot that the amount of time had not seemed sufficient to dispense 25 gallons. The pilot replied that the pumps were not like automotive pumps. The pilot then added fuel to the other wing, and the passenger called out when the meter reached 52 gallons. Upon completion of fueling, the pilot was unable to get a fuel receipt from the pump. The pilot reported that she did her normal pre-takeoff checks and then departed. About an hour after departure at an altitude of 13,000 ft, the engine experienced a total loss of power, and the pilot deployed the airplane's parachute system. The airplane descended under canopy and impacted terrain, where it came to rest upright. Before the occupants egressed, a gust of wind caught the parachute and dragged the airplane into trees, flipping the airplane upside down.

A visual inspection of the airplane at the accident site did not reveal any discrepancies with the engine. A credit card receipt for the fuel transaction indicated that the pilot purchased 5.23 gallons of fuel. Because the airplane was only filled with 5.23 gallons instead of the 52 gallons the pilot expected, the airplane did not have adequate fuel onboard to complete the flight. The before takeoff checklist includes the step "fuel quantity – confirm." The airplane's operating handbook states the airplane is equipped with a fuel gauge and a warning light that will illuminate if the fuel quantity drops below 14 gallons in each fuel tank. The investigation could not determine whether the pilot monitored the fuel system or observed a fuel warning light, but the circumstances are consistent with the pilot not verifying the fuel quantity prior to the flight, or monitoring the fuel quantity in flight, which resulted in a total loss of engine power due to fuel exhaustion.

Flight Events

Prior to flight - Aircraft servicing event
Enroute - Fuel exhaustion
Enroute - Loss of engine power (total)
Uncontrolled descent - Collision with terr/obj (non-CFIT)
After landing - Nose over/nose down

Probable Cause

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

A total loss of engine power due to fuel exhaustion. Contributing to the accident was the pilot's inadequate oversight of the airplane's refueling and her subsequent failure to verify and monitor the fuel quantity before and during the flight.

Findings

Aircraft-Aircraft handling/service-(general)-(general)-Incorrect service/maintenance - C
Personnel issues-Task performance-(general)-(general)-Pilot - C

Pilot Information

Certificate:	Private	Age:	65
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	493 hours (Total, all aircraft), 273 hours (Total, this make and model), 445 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CIRRUS DESIGN CORP	Registration:	N2711M
Model/Series:	SR22 NO SERIES	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	CONT MOTOR
Operating Certificate(s) Held:	None	Engine Model/Series:	IO-550-N
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Weather Information Source:	Pilot
Lowest Ceiling:		Wind Speed/Gusts, Direction:	/ ,
Temperature:		Visibility:	
Precipitation and Obscuration:	No Precipitation		
Departure Point:	Las Vegas, NM (KLVS)	Destination:	Phoenix, AZ (KGYR)

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	3 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	35.036111, -107.367222 (est)		

Administrative Information

Investigator In Charge (IIC):	Craig Hatch	Adopted Date:	11/28/2016
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=92786		

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.

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