



National Transportation Safety Board Aviation Accident Data Summary

Location:	Cumberland, RI	Accident Number:	NYC08LA299
Date & Time:	09/01/2008, 0830 EDT	Registration:	N5529J
Aircraft:	PIPER PA-32-260	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The owner/pilot departed in the single-engine airplane for the personal cross-country flight. He climbed to and set the power for a cruise altitude of 7,500 feet, and noted that his digital engine monitor indicated an engine speed of 2,300 rpm. Shortly thereafter, without any unusual noises or vibration, the engine speed decreased to 1,100 rpm, the manifold pressure appeared unchanged, and the airplane started to descend. The pilot exercised the propeller control to increase the rpm, but there was no response to his inputs. He declared an emergency, and attempted to divert to a nearby airport, but then elected to perform an off-airport landing in a field. During the rollout, the airplane struck bushes and trees that bordered the field. The pilot received minor injuries, and there was no fuel spill. Post-accident examination of the airplane revealed that the two inboard fuel tanks were full, the right outboard contained several gallons, and the left outboard tank contained only trace amounts of fuel. The fuel selector valve was reset to one of the main tanks; the engine started readily, and ran normally. Engine monitor data showed that during the flight, combustion had ceased, but the propeller continued to windmill during the 6 minutes of the descent. The pilot did not recognize the power loss, and misdiagnosed it as a propeller problem, and did not continue his trouble-shooting to positively identify and correct the underlying problem. In addition, the pilot's fuel management procedures were not in compliance with the procedures specified in the airplane manufacturer's operating manual. It stated that, "...If time permits," the pilot should manipulate the throttle and fuel selector in a continued attempt to restore engine power. Below that, a note stated "...If engine power was caused by fuel exhaustion, power will not be regained after tanks are switched until empty fuel lines are filled, which may require up to ten seconds...."

Flight Events

Enroute-cruise - Fuel starvation
Enroute-cruise - Loss of engine power (total)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper fuel management practices, which resulted in fuel starvation and a complete power loss. Contributing to the accident was the pilot's misdiagnosis of the situation, and his cessation of trouble-shooting to positively identify and correct the underlying problem.

Findings

Aircraft-Aircraft power plant-Engine fuel and control-Fuel distribution-Incorrect use/operation
Aircraft-Fluids/misc hardware-Fluids-Fuel-Fluid management - C
Personnel issues-Task performance-Use of equip/info-Use of equip/system-Pilot - C
Personnel issues-Task performance-Use of equip/info-Use of policy/procedure-Pilot - C
Personnel issues-Action/decision-Info processing/decision-Identification/recognition-Pilot - F

Personnel issues-Task performance-Use of equip/info-Use of checklist-Pilot
Environmental issues-Physical environment-Object/animal/substance-Tree(s)-Contributed to
outcome

Pilot Information

Certificate:	Private	Age:	58
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	580 hours (Total, all aircraft), 385 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N5529J
Model/Series:	PA-32-260	Engines:	Reciprocating
Operator:	Tri-Radial Flyers	Engine Manufacturer:	Lycoming
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-540 SERIES
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	SFZ	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:		Wind Speed/Gusts, Direction:	8 knots, 320°
Temperature:	18°C / 11°C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Providence, RI (PVD)	Destination:	Cumberland, RI (SZF)

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Michael C Huhn	Adopted Date:	03/23/2010
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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