



Aviation Investigation Final Report

Location:	Highgate, Vermont	Accident Number:	ERA10CA002
Date & Time:	October 3, 2009, 11:45 Local	Registration:	N9237P
Aircraft:	Piper PA-24-260	Aircraft Damage:	Substantial
Defining Event:	Fuel starvation	Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, he was conducting multiple 10- to 15-minute "Young Eagle" flights. After taking off on the fifth flight, and as the airplane reached 300 feet, the engine lost power. The pilot switched fuel tanks and verified that the fuel pump was on, but to no avail. He then force-landed the airplane on the departure end of the runway. However, the airplane continued off the end of the runway and through a grassy overrun for about 100 yards, until it impacted a fence, substantially damaging both wings. The pilot noted that there were two main fuel tanks and two auxiliary fuel tanks on the airplane, and that during the first four flights, he only utilized fuel from the left main tank. Prior to the fifth flight, both auxiliary tanks and the right main tank were full, and the left main tank indicated 1/4 full. The pilot initially switched fuel feed to the right main tank, but then decided to utilize the remaining fuel in the left main tank, and switched back to that tank before takeoff. Postflight examination of the left fuel tank revealed no fuel in the tank. The pilot also stated that there were no preexisting mechanical anomalies with the airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper fuel management which resulted in loss of engine power due to fuel starvation.

Findings

Aircraft	Fuel - Fluid management
Personnel issues	Knowledge of equipment - Pilot

Factual Information

History of Flight

Takeoff	Fuel starvation (Defining event)
Takeoff	Loss of engine power (total)
Emergency descent	Off-field or emergency landing
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial	Age:	57, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 1, 2008
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 22, 2009
Flight Time:	845 hours (Total, all aircraft), 48 hours (Total, this make and model), 780 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N9237P
Model/Series:	PA-24-260	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-4736
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	October 3, 2009 Annual	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4977 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	TIO-540 SER
Registered Owner:	Robert Desmarais	Rated Power:	310 Horsepower
Operator:	Robert Desmarais	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KFSO, 228 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:45 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:		Visibility:	10 miles
Lowest Ceiling:	Overcast / 2900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	14°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Highgate, VT (KFSO)	Type of Flight Plan Filed:	None
Destination:	Highgate, VT (KFSO)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Franklin County State Airport KFSO	Runway Surface Type:	Asphalt
Airport Elevation:	228 ft msl	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	3000 ft / 60 ft	VFR Approach/Landing:	Forced landing

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
Total Injuries:	4 None	Latitude, Longitude:	44.940277,-73.097221(est)

Administrative Information

Investigator In Charge (IIC): Cox, Paul

Additional Participating Persons:

Original Publish Date: April 19, 2010

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=74842>

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