



# **Aviation Investigation Final Report**

Location: Holland, Massachusetts Accident Number: ERA09CA489

Date & Time: August 27, 2009, 17:25 Local Registration: N33078

Aircraft: Piper J5A Aircraft Damage: Substantial

**Defining Event:** Ground collision **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot stated that he began the day with an unknown quantity of fuel. Shortly after departing on his second flight of the day, the airplane suffered a complete loss of engine power. During the subsequent forced landing, the left main landing gear caught tall grass and ground-looped the airplane, which resulted in substantial damage to the left landing gear, left wing strut, and left lower fuselage. Post accident examination of the wreckage by a Federal Aviation Administration (FAA) inspector revealed no odor of fuel, no fuel spillage, and 5 ounces of fuel in the airplane. The pilot reported that there were no mechanical deficiencies with the airplane.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to fuel exhaustion. A factor in the accident was the pilot's inadequate preflight inspection.

#### **Findings**

Personnel issues Fuel planning - Pilot

Personnel issues Preflight inspection - Pilot

Aircraft Fuel - Fluid level

## **Factual Information**

### History of Flight

Prior to flight	Preflight or dispatch event
Enroute-cruise	Fuel exhaustion
Enroute-cruise	Loss of engine power (total)
Landing	Off-field or emergency landing
Landing-flare/touchdown	Ground collision (Defining event)

#### **Pilot Information**

Certificate:	Private	Age:	54,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	April 29, 2008
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 12, 2008
Flight Time:	443 hours (Total, all aircraft), 400 hours (Total, this make and model), 385 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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### **Aircraft and Owner/Operator Information**

Aircraft Make:	Piper	Registration:	N33078
Model/Series:	J5A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5-426
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	February 19, 2009 Annual	Certified Max Gross Wt.:	1450 lbs
Time Since Last Inspection:	56 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	9513 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	A&C75 SERIES
Registered Owner:	Mark E Horan	Rated Power:	75 Horsepower
Operator:	HORAN MARK E	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KPBL,173 ft msl	Distance from Accident Site:	29 Nautical Miles
Observation Time:	15:30 Local	Direction from Accident Site:	262°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	22°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Southbridge, MA (3B0)	Type of Flight Plan Filed:	None
Destination:	Warehouse Point, CT (7B6)	Type of Clearance:	None
Departure Time:	17:15 Local	Type of Airspace:	

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### **Wreckage and Impact Information**

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.035556,-72.194442(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	John Rote; FAA/FSDO; Windsor Locks, CT
Original Publish Date:	December 29, 2009
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.ntsb.gov/Docket?ProjectID=74618

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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