



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Jacksonville, Florida	Accident Number:	NYC07LA138
Date & Time:	June 9, 2007, 17:00 Local	Registration:	N193BA
Aircraft:	Piper PA38	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot departed his home airport and flew to a nearby airport (a 10 minute flight), where he performed three touch-and-go landings. About 5 minutes into the return flight, the airplane's engine began to "cough and sputter," and then lost power. The pilot attempted, unsuccessfully, to restart the engine, and then performed a forced landing to a beach, during which the airplane was substantially damaged. The accident flight was the second flight since the pilot completed an annual inspection on the airplane. Prior to the annual inspection, the airplane was not flown for 14 years. The airplane was last refueled on the morning of the accident with 20 gallons of fuel, and was then flown for approximately 90 minutes, prior to the accident flight. Examination of the airplane revealed five gallons of fuel in the right fuel tank, and the left fuel tank was empty. No fuel was observed in the input line to the fuel pump, the output line from the fuel pump, or the gascolator. The airplane's fuel consumption was between 7 to 10 gallons per hour.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to perform adequate pre-flight fuel consumption calculations, which resulted in a loss of power due to fuel starvation.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE

Findings

1. FLUID,FUEL - STARVATION

2. (C) FUEL CONSUMPTION CALCULATIONS - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

3. TERRAIN CONDITION - SAND BAR

Factual Information

On June 9, 2007, at 1700 eastern daylight time, a Piper PA-38-112, N193BA, was substantially damaged during a forced landing in Jacksonville, Florida. The certificated commercial pilot and passenger were not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the flight which originated at the Herlong Airport (HEG), Jacksonville, Florida. The local personal flight was conducted under 14 Code of Federal Regulations Part 91.

According to the pilot, he originally departed from his home base at Craig Municipal Airport (CRG), Jacksonville, Florida, at 1630, and flew to HEG to practice takeoffs and landings. After three touch-and-go landings, the pilot departed for the return flight to CRG, during which he decided to fly over the beach. About 5 minutes into the flight, the airplane's engine began to "cough and sputter," and then lost power. The pilot stated he switched fuel tanks from the right to the left tank, turned the boost pump on, and attempted unsuccessfully to restart the engine. He then performed a forced landing to the beach, during which the airplane was substantially damaged.

The pilot reported that the accident flight was the second flight since he completed an annual inspection of the airplane. Prior to the annual inspection, the airplane was not flown for 14 years. The airplane was last refueled on the morning of the accident with 20 gallons of fuel, and was then flown for approximately 90 minutes, prior to the accident flight.

Examination of the airplane by a Federal Aviation Administration (FAA) inspector revealed that there were five gallons of fuel in the right fuel tank, and the left fuel tank was empty. No fuel was observed in the input line to the fuel pump, the output line from the fuel pump, or the gascolator.

According to a representative from the aircraft manufacturer, the Piper PA-38-112 had two 16-gallon fuel tanks, 1 gallon of which was unusable in each tank. The airplane's engine consumed 9.5 gallons per hour at full power, 6.7 gallons per hour at 75 percent power, and 5.8 gallons per hour at 65 percent power.

According to FAA records, the pilot held a commercial pilot certificate with ratings for airplane multi-engine land, airplane single-engine land, and instrument airplane. He also held an airframe and powerplant mechanic certificate.

Weather reported at Jacksonville International Airport (JAX), at 1656, included calm winds, 10 miles visibility, few clouds at 5,000 feet, scattered clouds at 25,000 feet, temperature 35 degrees Celsius, dew point 19 degrees Celsius, and altimeter setting 29.84 inches mercury.

Pilot Information

Certificate:	Commercial	Age:	49, 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 2 With waivers/limitations	Last FAA Medical Exam:	August 1, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 1, 2006
Flight Time:	2058 hours (Total, all aircraft), 2 hours (Total, this make and model), 1996 hours (Pilot In Command, all aircraft), 19 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N193BA
Model/Series:	PA38 112	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	38-78A0083
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	June 1, 2007 Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:		Engines:	1
Airframe Total Time:	5788 Hrs as of last inspection	Engine Manufacturer:	
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	
Registered Owner:	Phillip Hobbs	Rated Power:	
Operator:	Doug Lundeen	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	JAX,30 ft msl	Distance from Accident Site:	
Observation Time:	16:56 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/ None	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.86 inches Hg	Temperature/Dew Point:	35°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Jacksonville, FL (HEG)	Type of Flight Plan Filed:	None
Destination:	Jacksonville, FL (CRG)	Type of Clearance:	None
Departure Time:	16:50 Local	Type of Airspace:	

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:	30.288888,-81.387222

Administrative Information

Investigator In Charge (IIC): Andrews, Jill

Additional Participating Persons: Clifford Baggett; FAA/FSDO; Orlando, FL

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Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=66013>

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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](#).