



Aviation Investigation Final Report

Location: St. Charles, Missouri Accident Number: CHI05CA093

Date & Time: April 8, 2005, 16:45 Local Registration: N36691

Aircraft: Piper PA-32RT-300 Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The airplane sustained substantial damage during a forced landing to a field after a loss of engine power. The pilot reported that the flight departed with about 36 gallons of fuel in the left tank and 14 gallons of fuel in the right tank. The pilot reported that the engine lost power about four miles from the intended destination airport. The airplane's altitude was 1,500 feet. The pilot executed a forced landing to the only open field in a suburban area. The inspection of the airplane revealed that the fuel selector was on the right fuel tank. The right fuel tank was empty and the left fuel tank was full. The inspection revealed that the airplane struck trees on its final approach to landing in the field.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate in-flight planning/decision by his failure to switch fuel tanks which resulted in fuel starvation and the loss of engine power. A factor was the trees.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: CRUISE

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND

2. (C) FUEL TANK SELECTOR POSITION - INADEQUATE - PILOT IN COMMAND

3. (C) FLUID, FUEL - STARVATION

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

4. (F) OBJECT - TREE(S)

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

5. TERRAIN CONDITION - GROUND

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Factual Information

On April 8, 2005, at 1645 central daylight time, a Piper PA-32RT-300, N36691, sustained substantial damage during a forced landing to a field near St. Charles, Missouri, after a loss of engine power. The pilot was not injured. The CFR Part 91 personal flight departed the Roy Otten Memorial Airfield (3VS), Versailles, Missouri, at 1600, and was en route to Creve Coeur Airport (1H0), St. Louis, Missouri. Visual meteorological conditions prevailed. No flight plan was filed.

The pilot reported that the flight departed 3VS with about 36 gallons of fuel in the left tank and 14 gallons of fuel in the right tank. While approaching 1H0, the pilot contacted the Spirit of St. Louis (SUS) tower to obtain a flight clearance through the SUS class D airspace and for traffic avoidance. The pilot reported that immediately after clearing the class D airspace, the engine lost power. The pilot reported, "At this point I was at 1,500 feet flying over houses and in concentration of finding an emergency landing site and maintaining airspeed control and turning to line up with [the] field, I apparently did not have time to analyze the cause of the power loss." The pilot landed in a field about four miles west of 1H0.

The inspection of the airplane revealed that the fuel selector was on the right fuel tank. The right fuel tank was empty and the left fuel tank was full. The inspection revealed that the airplane struck trees on its final approach to landing in a field located in a suburban area.

Pilot Information

Certificate:	Commercial	Age:	43,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2	Last FAA Medical Exam:	January 20, 2004
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	693 hours (Total, all aircraft), 418 hours (Total, this make and model), 35 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N36691
Model/Series:	PA-32RT-300	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32R-7885202
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:		Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	IO-540-K1G5D
Registered Owner:	Keri Evans	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Versales, MO (3V5)	Type of Flight Plan Filed:	None
Destination:	Creve Coeur, MO (1H0)	Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	Class E

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Airport Information

Airport:	Creve Coeur Airport 1H0	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 None	Latitude, Longitude:	38.726665,-90.508056

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Administrative Information

Investigator In Charge (IIC):	Silliman, James
Additional Participating Persons:	
Original Publish Date:	July 7, 2005
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61345

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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