

Aviation Investigation Final Report

Location: Geneseo, Illinois Accident Number: CEN14CA365

Date & Time: July 2, 2014, Registration: N2209G

Aircraft: Cessna 182A Aircraft Damage: Substantial

Defining Event: Fuel exhaustion **Injuries:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Skydiving

Analysis

The pilot was on final approach when the engine started to run out of fuel. She said her boss had a similar problem on a previous flight, and had to correct for it by pitching the nose up and down to force fuel into the fuel lines. The pilot recalled pitching the nose up and down but nothing after that. A witness, who saw the airplane pitching up and down several times before it impacted the ground, responded to the crash. He noted that the fuel selector was set to the "both" position and no fuel was leaking from either fuel tank's gas cap. When the airplane was righted, the witness said he saw several gallons of fuel drain from the left tank but not the right tank. When he visually checked the right fuel tank, it was empty. The left tank had about 9 gallons (about 6.5 gallons usable) still in the tank. A postaccident examination of the airplane by a Federal Aviation Administration inspector revealed the airplane sustained substantial damage to the firewall, forward engine mounts, right wing and vertical stabilizer and rudder. About 6 gallons of fuel was drained from the left wing tank and the right tank was empty. A review of the terrain where the airplane impacted the ground revealed the vegetation around the left tank was discolored from fuel, but the area around the right tank was not. No pre mishap mechanical discrepancies were noted with the engine or airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's mismanagement of the available fuel supply, which resulted in a loss of engine power due to fuel exhaustion.

Findings

Aircraft Fuel - Fluid management

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Factual Information

History of Flight

Approach-VFR pattern final	Fuel exhaustion (Defining event)
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Pilot Information

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Certificate:	Commercial	Age:	21
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	June 4, 2014
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	233 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N2209G
Model/Series:	182A A	Aircraft Category:	Airplane
Year of Manufacture:	1958	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	51509
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2348 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:		Engine Model/Series:	0-470 SERIES
Registered Owner:	QUAD CITY SKYDIVING CENTER INC	Rated Power:	0 Horsepower
Operator:	QUAD CITY SKYDIVING CENTER INC	Operating Certificate(s) Held:	None

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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:	Geneseo, IL (3G8)	Type of Flight Plan Filed:	
Destination:	Geneseo, IL (3G8)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Geneseo Airpark 3G8	Runway Surface Type:	Grass/turf
Airport Elevation:	645 ft msl	Runway Surface Condition:	
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	2568 ft / 120 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	41.440715,-90.150032(est)

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Administrative Information

Investigator In Charge (IIC):	Yeager, Leah
Additional Participating Persons:	
Original Publish Date:	September 24, 2014
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=89668

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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