

Aviation Investigation Final Report

Location: Princeton, Minnesota Accident Number: CHI07CA263

Date & Time: August 10, 2007, 20:35 Local Registration: N2311C

Aircraft: Cessna 180 Aircraft Damage: Substantial

Defining Event: 1 Minor, 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The airplane sustained substantial damage during a forced landing to a field after the loss of engine power during cruise. The pilot reported that he had stopped at an en route airport to refuel prior to continuing to his final destination airport. He had the lineman at the fixed base operator add 7 gallons of fuel to each wing tank for a total of 14 gallons. The pilot reported that the lineman placed the fueling ladder on his truck and the pilot went in to pay the bill. The pilot did not check the tanks or the fuel caps after the lineman had added the fuel. The pilot reported that he departed and approximately 1:05 hours of flight later, the airplane's engine stopped running. He reported the fuel indicators showed empty on the left tank, but 1/2 or better on the right tank. The fuel selector was in the BOTH position. He executed a forced landing to a soybean field, but the field was too short and the airplane became airborne again before landing hard in a field. The inspection of the airplane revealed that the right fuel door was open and the filler cap was off and dangling by the chain attached to the filler neck. A fuel stain was observed that went from the filler neck to the trailing edge of the right flap. The left and right fuel tanks were empty.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power due to fuel exhaustion as a result of the pilot's inadequate preflight. A factor was the fuel siphoning from the right fuel tank.

Findings

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

Phase of Operation: CRUISE

Findings

1. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

2. (C) FLUID, FUEL - EXHAUSTION

3. (F) FLUID, FUEL - SIPHONING

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: HARD LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

4. UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - PILOT IN COMMAND

5. TERRAIN CONDITION - ROUGH/UNEVEN

Page 2 of 6 CHI07CA263

Factual Information

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Pilot Information

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Certificate:	Airline transport; Commercial; Flight engineer	Age:	56,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 1	Last FAA Medical Exam:	July 1, 2007
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	24500 hours (Total, all aircraft), 220 hours (Total, this make and model), 235 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft)		

Page 3 of 6 CHI07CA263

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N2311C
Model/Series:	180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	30611
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	0-470-R
Registered Owner:	Michael Hayden/Dave Mills	Rated Power:	
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:	La Crosse, WI (LSE)	Type of Flight Plan Filed:	None
Destination:	Princeton, MN (PNM)	Type of Clearance:	VFR flight following
Departure Time:	19:35 Local	Type of Airspace:	

Page 4 of 6 CHI07CA263

Airport Information

Airport:	Princeton Municipal PNM	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	33	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	45.559722,-93.608055

Page 5 of 6 CHI07CA263

Administrative Information

Investigator In Charge (IIC):Silliman, JamesAdditional Participating Persons:Last Revision Date:Last Revision Date:December 20, 2007Investigation Class:ClassNote:This accident report documents the factual circumstances of this accident as described to the NTSB.Investigation Docket:https://data.ntsb.gov/Docket?ProjectID=66639

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.

Page 6 of 6 CHI07CA263