



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	MARION, IA	<b>Accident Number:</b>	CHI93LA292
<b>Date &amp; Time:</b>	08/01/1993, 2030 CDT	<b>Registration:</b>	N49899
<b>Aircraft:</b>	CESSNA 152	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None

**Flight Conducted Under:** Part 91: General Aviation - Personal

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## Analysis

THE PILOT REPORTED A LOSS OF POWER FOLLOWING AN ABORTED VFR LANDING APPROACH AT MARION. THE AIRPLANE NOSED OVER DURING THE SUBSEQUENT FORCED LANDING IN A FIELD. EXAMINATION OF THE AIRPLANE SHOWED FUEL IN THE FUEL LINE, BUT ONLY ONE GALLON(TOTAL) WAS DRAINED FROM THE FUEL TANKS. THE AIRPLANE'S OPERATING HANDBOOK LISTS THE UNUSABLE FUEL AS 1.5 GALLONS. NO POSTACCIDENT MECHANICAL ANOMALIES WERE DISCOVERED WITH THE ENGINE OR THE FUEL SYSTEM.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the pilot to refuel prior to fuel exhaustion.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: GO-AROUND (VFR)

### Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: NOSE OVER  
Phase of Operation: LANDING - ROLL

## Factual Information

On August 1, 1993, about 2030 central daylight time, a Cessna 152 airplane, N49899, sustained substantial damage during a forced landing to a field near the Marion Airport, Marion, Iowa. The commercial pilot and sole passenger aboard were not injured. The personal flight operated without flight plan under 14 CFR Part 91 in visual meteorological conditions. The flight departed Hannibal, Missouri, about 1830.

The pilot reported a loss of engine power following an aborted landing approach at Marion. The airplane nosed over during the subsequent forced landing in a field.

Examination of the airplane revealed fuel in the fuel line, but only one gallon(total)of fuel was drained from the fuel tanks. The airplane operating handbook lists the total fuel capacity as 26 gallons, with 1.5 gallons unusable.

No postaccident mechanical anomalies were discovered with the engine or fuel system.

## Pilot Information

<b>Certificate:</b>	Commercial; Private	<b>Age:</b>	43, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	03/18/1993
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	522 hours (Total, all aircraft), 200 hours (Total, this make and model), 399 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N49899
Model/Series:	152 152	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted; Normal	Serial Number:	15281381
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	06/11/1993, Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	95 Hours	Engines:	1 Reciprocating
Airframe Total Time:	5446 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-235-L2CM
Registered Owner:	P & N FLIGHT AND CHARTER CORP.	Rated Power:	110 hp
Operator:	P & N FLIGHT AND CHARTER CORP.	Operating Certificate(s) Held:	On-demand Air Taxi (135)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	HANNIBAL, MO (HAE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1830 EDT	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:	

## Administrative Information

**Investigator In Charge (IIC):** JAMES D LA BELLE **Report Date:** 08/17/1994

**Additional Participating Persons:** J. ROBERT BOLINGER; DES MOINES, IA

**Publish Date:**

**Investigation Docket:** NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at [pubinq@ntsb.gov](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).