



# Aviation Investigation Final Report

<b>Location:</b>	CANTON, Michigan	<b>Accident Number:</b>	CHI82DA040
<b>Date &amp; Time:</b>	February 7, 1982, 15:30 Local	<b>Registration:</b>	N46733
<b>Aircraft:</b>	CESSNA 152	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

THE STUDENT PILOT WAS ON THE SECOND LEG OF HIS CROSS-COUNTRY FLIGHT WHEN THE ENGINE LOST POWER. HE LANDED IN A SNOW COVERED, PLOWED FIELD. AFTER ABOUT 60 FEET OF GROUND ROLL, THE PLANE NOSED OVER. THE STUDENT STATED THAT THE ENGINE STARTED RUNNING ROUGH UNTIL HE APPLIED CARBURETOR HEAT, AND THEN IT SMOOTHED OUT. HE STATED THAT HE CUT-OFF THE CARBURETOR HEAT, AND THEN ABOUT ONE MINUTE LATER, THE ENGINE QUIT. HOWEVER, ANOTHER PILOT STATED THAT HE HEARD THE STUDENT TRANSMIT THAT HE WAS GOING DOWN AND THAT HE WAS OUT OF FUEL OR EXPERIENCED FUEL STARVATION. ALSO, WHEN THE PLANE WAS EXAMINED BY TWO OTHER PERSONS, THEY FOUND NO FUEL IN THE PLANE AND NO EVIDENCE THAT FUEL HAD LEAKED ON THE SNOW COVERED TERRAIN. ADDITIONALLY, THE AIRCRAFT HAD NOT BEEN REFUELED DURING THE FIRST STOP OF THE CROSS-COUNTRY.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) FLUID,FUEL - EXHAUSTION
  2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
  3. (F) LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
  4. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

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

Findings  
5. (F) TERRAIN CONDITION - SNOW COVERED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	37, Male
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	November 19, 1981
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	38 hours (Total, all aircraft), 37 hours (Total, this make and model), 15 hours (Pilot In Command, all aircraft), 37 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N46733
<b>Model/Series:</b>	152 152	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	15283096
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	1670 lbs
<b>Time Since Last Inspection:</b>	21 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1149 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	O-235-L2C
<b>Registered Owner:</b>	NEIL R. BAIR	<b>Rated Power:</b>	110 Horsepower
<b>Operator:</b>	NEIL R. BAIR	<b>Operating Certificate(s) Held:</b>	
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Unknown	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	240°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	FT. WAYNE , IN	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	ANN ARBOR , MI	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:30 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	42.370582,-83.459579(est)

## Administrative Information

**Investigator In Charge (IIC):**

**Additional Participating Persons:**

**Original Publish Date:** February 7, 1983

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=70124>

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.

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