



# Aviation Investigation Final Report

<b>Location:</b>	DECATUR, Indiana	<b>Accident Number:</b>	CHI90DET01
<b>Date &amp; Time:</b>	November 23, 1989, 10:50 Local	<b>Registration:</b>	N5483P
<b>Aircraft:</b>	PIPER PA-24-250	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE PILOT REPORTED BEING LOW ON FUEL AND REQUESTED VECTORS TO THE NEAREST AIRPORT DURING THE CROSS COUNTRY FLIGHT. FUEL EXHAUSTION OCCURRED 15 MILES SHORT OF THE NEAREST AIRPORT AND A FORCED LANDING WAS MADE IN A FIELD DURING WHICH THE AIRPLANE WAS DAMAGED. THE PILOT MISJUDGED THE INITIAL FUEL QUANTITY AT TAKEOFF AND FAILED TO ACCOUNT FOR THE HIGHER EN ROUTE POWER SETTINGS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S MISJUDGEMENT OF THE FUEL SUPPLY, INACCURATE FUEL CONSUMPTION CALCULATIONS, AND HIS IMPROPER IN-FLIGHT PLANNING/DECISION, WHICH RESULTED IN FUEL EXHAUSTION. THE LACK OF SUITABLE TERRAIN FOR AN EMERGENCY LANDING WAS A RELATED FACTOR.

## Findings

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

### Findings

1. FLUID,FUEL - EXHAUSTION
2. (C) FUEL SUPPLY - MISJUDGED - PILOT IN COMMAND
3. (C) FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND
4. (F) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY  
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Occurrence #3: GEAR COLLAPSED  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. (F) TERRAIN CONDITION - NONE SUITABLE

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	30, 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>	
<b>Instrument Rating(s):</b>	None	<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>	October 4, 1988
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	345 hours (Total, all aircraft), 22 hours (Total, this make and model), 242 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N5483P
<b>Model/Series:</b>	PA-24-250 PA-24-250	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	24-543
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	June 13, 1989 Annual	<b>Certified Max Gross Wt.:</b>	2800 lbs
<b>Time Since Last Inspection:</b>	93 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1892 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-540-A
<b>Registered Owner:</b>	FAA FLYING CLUB INC	<b>Rated Power:</b>	250 Horsepower
<b>Operator:</b>	PHILIP RAILSBACK	<b>Operating Certificate(s) Held:</b>	None
<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>	Scattered / 1200 ft AGL	<b>Visibility</b>	7 miles
<b>Lowest Ceiling:</b>	Broken / 2100 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	230°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	-3°C / -6°C
<b>Precipitation and Obscuration:</b>	Light - Showers - Snow		
<b>Departure Point:</b>	WASHINGTON , DC (DCA )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	FORT WAYNE , IN (FWA )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	08:10 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## 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>	40.830894,-84.919692(est)

## Administrative Information

**Investigator In Charge (IIC):** Kepple, David

**Additional Participating Persons:** M. BARMAN;

**Original Publish Date:** June 30, 1992

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=14491>

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