



# Aviation Investigation Final Report

<b>Location:</b>	BINGHAM, New Mexico	<b>Accident Number:</b>	DEN90LA169
<b>Date &amp; Time:</b>	August 11, 1990, 08:42 Local	<b>Registration:</b>	N5470P
<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 PRIVATE PILOT REPORTED THE ENGINE QUIT AT CRUISE WHILE ON A CROSS COUNTRY FLIGHT. HE MADE AN EMERGENCY LANDING IN A FIELD COVERED WITH MADRONA CEDAR BRUSH. THE WINGS STRUCK THE BRUSH, TORE HALF THE LEFT WING OFF, BENT THE RIGHT WING BACK AND BENT THE FUSELAGE BEHIND THE CABIN. THE PILOT SAID HE FLEW 3 HOURS AND 15 MINUTES, AND SHOULD HAVE HAD FUEL LEFT. THE INVESTIGATION REVEALED NO FUEL IN THE AIRCRAFT'S TANKS, AND NO FUEL SPILL. THE INVESTIGATION COULD NOT VERIFY THE TAKEOFF TIME, AMOUNT OF FUEL ON BOARD, OR THE EXACT TIME OF THE ACCIDENT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FUEL EXHAUSTION INDUCED POWER LOSS. FACTORS WERE THE PILOT'S FAILURE TO REFUEL AND THE UNSUITABLE TERRAIN IN WHICH THE FORCED LANDING WAS PERFORMED.

## Findings

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

### Findings

1. (C) FLUID,FUEL - EXHAUSTION

- 2. (F) REFUELING - NOT PERFORMED - PILOT IN COMMAND
- 3. FUEL CONSUMPTION CALCULATIONS - INADEQUATE - PILOT IN COMMAND

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

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - EMERGENCY

Findings

- 4. TERRAIN CONDITION - HIGH VEGETATION

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	36, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Unknown
<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>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	May 10, 1990
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	352 hours (Total, all aircraft), 14 hours (Total, this make and model), 294 hours (Pilot In Command, all aircraft), 37 hours (Last 90 days, all aircraft), 16 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>	N5470P
<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>		<b>Serial Number:</b>	PA-24-527
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	2800 lbs
<b>Time Since Last Inspection:</b>	0 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-540-A1A5
<b>Registered Owner:</b>		<b>Rated Power:</b>	250 Horsepower
<b>Operator:</b>	A&E SERVICES INC	<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>	Clear	<b>Visibility</b>	25 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	-18°C / -18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	HENDERSON , NV (L15)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	ARTESIA , NM (ATS)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	04:17 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	NONE	<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>	

## Administrative Information

**Investigator In Charge (IIC):** Collins, Robert

**Additional Participating Persons:**

**Original Publish Date:** September 28, 1992

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=17978>

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