



# Aviation Investigation Final Report

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<b>Location:</b>	Ogden, Utah	<b>Accident Number:</b>	DEN05LA019
<b>Date &amp; Time:</b>	November 2, 2004, 16:55 Local	<b>Registration:</b>	N7852P
<b>Aircraft:</b>	Piper PA-24-250	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Serious
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

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## Analysis

The pilot reported engine problems while on approach to the airport. During the forced landing, the airplane impacted a berm, and tall brush, causing substantial damage. A postaccident examination of the engine on the day of the accident revealed that the air box around the carburetor contained a small amount of water. The routine weather report taken at 1653 reported the temperature as 42 degrees Fahrenheit (F) and the dewpoint as 25 degrees F. According to the carburetor icing chart, conditions were conducive for icing at glide and cruise power. In addition, several other pilots flying in the area at the time of the accident reported experiencing carburetor icing.

## 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 carburetor icing. Contributing factors include the weather conditions conducive for carburetor icing, and a lack of suitable terrain for a forced landing.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: APPROACH

Findings

1. (C) FUEL SYSTEM, CARBURETOR - ICE
2. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE
4. TERRAIN CONDITION - HIGH VEGETATION
5. TERRAIN CONDITION - BERM

## Factual Information

On November 2, 2004, at approximately 1655 mountain standard time, a Piper PA-24-250, N7852P, operated by KW Aviation, was substantially damaged when it impacted terrain during a forced landing 3 miles north of Ogden-Hinckley Airport, Ogden, Utah. Visual meteorological conditions prevailed at the time of the accident. The training flight was being conducted under the provisions of Title 14 CFR Part 91 without a flight plan. The commercial certificated pilot and flight instructor sustained serious injuries. The local flight originated at approximately 1530.

According to the FAA inspector who traveled to the scene, the pilot reported engine problems while on approach for landing to the Ogden airport. During the forced landing, the airplane impacted a berm, and tall brush, separating the empennage. The right main landing gear penetrated the right wing and the outboard 2 feet of the left wing was crushed and bent up. Both pilots sustained head injuries and neither are able to remember the events leading up to the accident.

A postaccident examination of the engine on the day of the accident, conducted by the FAA, revealed that the air box around the carburetor contained a small amount of water. Further inspection of the engine and remaining airplane systems revealed no anomalies.

The Ogden routine weather report taken at 1653 reported the temperature as 42 degrees Fahrenheit (F) and the dewpoint as 25 degrees F. According to the carburetor icing chart, conditions were conducive for icing at glide and cruise power. The FAA inspector stated that several other pilots flying in the area at the time of the accident reported experiencing carburetor icing as well.

## Flight instructor Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	25, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	March 15, 2004
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	September 16, 2003
<b>Flight Time:</b>	1722 hours (Total, all aircraft), 59 hours (Total, this make and model), 1647 hours (Pilot In Command, all aircraft), 201 hours (Last 90 days, all aircraft), 69 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	33, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	October 6, 2004
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	October 7, 2004
<b>Flight Time:</b>	800 hours (Total, all aircraft), 100 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N7852P
<b>Model/Series:</b>	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>	24-3075
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	November 25, 2003 Annual	<b>Certified Max Gross Wt.:</b>	2900 lbs
<b>Time Since Last Inspection:</b>	82 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3825 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-540-A1D5
<b>Registered Owner:</b>	On File	<b>Rated Power:</b>	250 Horsepower
<b>Operator:</b>	KW Avation	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	OGD,4473 ft msl	<b>Distance from Accident Site:</b>	3 Nautical Miles
<b>Observation Time:</b>	16:53 Local	<b>Direction from Accident Site:</b>	180°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	3 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	290°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.36 inches Hg	<b>Temperature/Dew Point:</b>	6°C / -4°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Ogden, UT (OGD )	<b>Type of Flight Plan Filed:</b>	Unknown
<b>Destination:</b>	Ogden, UT (OGD )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:30 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	OGDEN-HINCKLEY OGD	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	4473 ft msl	<b>Runway Surface Condition:</b>	Dry;Rough;Vegetation
<b>Runway Used:</b>		<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>	2 Serious	<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>	2 Serious	<b>Latitude, Longitude:</b>	41.184444,-112.001113

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Bowling, David
<b>Additional Participating Persons:</b>	Dennis A Seals; FAA Flight Standards District Office; Salt Lake City, UT
<b>Original Publish Date:</b>	March 30, 2005
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=60498">https://data.ntsb.gov/Docket?ProjectID=60498</a>

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](#).