



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Cedar City, UT	<b>Accident Number:</b>	DEN04LA001
<b>Date &amp; Time:</b>	10/01/2003, 1255 MDT	<b>Registration:</b>	N9XQ
<b>Aircraft:</b>	Elliott Mustang II	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The pilot reported that he had just begun his descent when the airplane's engine suddenly lost power. The pilot attempted a restart without success. He said he declared an emergency, and established a best glide speed. The pilot set up for a forced landing to a state highway. He said he set "full flap" and "let the airplane stall at about 25-30 [feet], which resulted in a sudden drop ..." The airplane impacted on the road. The landing gear collapsed and the airplane slid on the road, substantially damaging both wings and the forward fuselage. The airplane came to a stop within 200 feet of its initial impact point. The pilot said he fueled the 28 gallon tank to full before leaving on his trip. The pilot reported that since the refueling he had flown a total of 2 hours and 20 minutes. The pilot said that the airplane's engine burns approximately 8 to 8-1/2 gallons per hour. An examination of the fuel tanks, lines, sump, and fuel filter showed no evidence of fuel. No other anomalies with the airplane were found.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight planning/preparation which led to fuel exhaustion and subsequent loss of engine power.

## Findings

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

### Findings

1. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. (F) FLUID,FUEL - EXHAUSTION

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

### Findings

3. EMERGENCY PROCEDURE - ATTEMPTED - PILOT IN COMMAND

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

### Findings

4. TERRAIN CONDITION - ROADWAY/HIGHWAY

## Factual Information

On October 1, 2003, at approximately 1255 mountain daylight time, an Elliott Mustang II, N9XQ, was substantially damaged when it impacted on a road during a forced landing, following a loss of engine power, 5 miles east of Cedar City, Utah. The private pilot, the sole person on board the airplane, reported no injuries. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under the provisions of Title 14 CFR Part 91 without a flight plan. The cross-country flight originated at Monument Valley, Arizona, at 1200, and was en route to the pilot's private airstrip near Cedar City.

The pilot reported that he had just begun his descent into Cedar City when the airplane's engine suddenly quit. The pilot attempted a restart without success. He said he called Cedar City Flight Service, declared an emergency, and established best glide speed. The pilot set up for a forced landing on Utah State Highway 14. He said he set "full flap" and "let the airplane stall at about 25-30 [feet], which resulted in a sudden drop ..." The airplane impacted on the road. The landing gear collapsed and the airplane slid on the road, coming to a stop within 200 feet of its initial impact point.

The pilot stated he had fully fueled the airplane at Cedar City before flying to Monument Valley. He said the fuel tank held 28 gallons. The pilot said the trip to Monument Valley takes about an hour and the airplane's engine burns approximately 8 to 8-1/2 gallons per hour. The pilot said he had flown about 2 hours and 20 minutes since the fueling, when the engine quit.

The airplane was examined at the accident site. It rested upright on the right edge of the highway, up against a rock face. The lower cowling and bottom of the fuselage at the cockpit area were crushed upward. The upper cowling was buckled outward. The left wing was crushed upward. The outboard-third of the left wing was bent upward approximately 70 degrees. The outboard section of the right wing was bent and broken upward and aft. The landing gear legs were broken out. One of the three propeller blades was broken aft. Flight control continuity was confirmed. An examination of the fuel tanks, lines, sump, and fuel filter showed no evidence of fuel. No other anomalies with the airplane were found.

The pilot did not return the Safety Board Form 6120.1/2. The pilot did provide a written statement and copies of his pilot and airplane records.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	59, 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>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 None	<b>Last FAA Medical Exam:</b>	10/18/2001
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	11/30/2001
<b>Flight Time:</b>	1175 hours (Total, all aircraft), 84 hours (Total, this make and model), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Elliott	<b>Registration:</b>	N9XQ
<b>Model/Series:</b>	Mustang II	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental	<b>Serial Number:</b>	1684
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	11/16/2002, Annual	<b>Certified Max Gross Wt.:</b>	1985 lbs
<b>Time Since Last Inspection:</b>	48 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	132 Hours at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360
<b>Registered Owner:</b>	Lynne E. Elliott	<b>Rated Power:</b>	200 hp
<b>Operator:</b>	Lynne E. Elliott	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CDC, 5626 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	1253 MDT	Direction from Accident Site:	270°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	20 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.22 inches Hg	Temperature/Dew Point:	27° C / 2° C
Precipitation and Obscuration:			
Departure Point:	Monument Valley, AZ	Type of Flight Plan Filed:	None
Destination:	Cedar City, UT (CDC)	Type of Clearance:	None
Departure Time:	1200 MST	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	37.701111, -113.098611

## Administrative Information

Investigator In Charge (IIC):	David C Bowling	Report Date:	03/02/2004
Additional Participating Persons:	Eric McRae; Federal Aviation Administration; Salt Lake City, UT		
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 <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).