



# Aviation Investigation Final Report

<b>Location:</b>	Morrilton, Arkansas	<b>Accident Number:</b>	CHI03LA253
<b>Date &amp; Time:</b>	August 10, 2003, 18:00 Local	<b>Registration:</b>	N72971
<b>Aircraft:</b>	Cessna 140	<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 airplane was substantially damaged during a forced landing following a total loss of engine power during initial climb. The pilot executed the landing on a field at the departure end of the runway where he hit a mound and a tree. The pilot described the field as bad. Inspection of the airplane revealed that the airplane fuel system was contaminated with the airplane's fuel hose material. The airplane was last fueled approximately one month prior to the accident.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The deterioration of the fuel line resulting in fuel contamination and the loss of engine power.

## Findings

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

### Findings

1. (C) FUEL SYSTEM,LINE - DETERIORATED
  2. (C) FLUID,FUEL - CONTAMINATION,OTHER THAN WATER
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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: EMERGENCY LANDING AFTER TAKEOFF

Findings

3. (F) TERRAIN CONDITION - GROUND

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Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

4. OBJECT - TREE(S)

## Factual Information

On August 10, 2003, at 1800 central daylight time, a Cessna 140 single-engine airplane, N72971, registered to and operated by a private-rated pilot, was substantially damaged during a forced landing at Morrilton Municipal Airport (BDQ), Morrilton, Arkansas. The airplane experienced a complete loss of engine power during initial climb from runway 09. Visual meteorological conditions prevailed at the time of the accident. The Title 14 Code of Federal Regulations Part 91 personal flight was not operating on a flight plan. The pilot reported minor injuries. The flight originated from BDQ at 1712.

The pilot reported that he performed a pre-flight of the airplane prior to departing to the north of BDQ to practice maneuvers. He then returned to BDQ where he performed a touch and go on runway 09 (4,000 feet by 50 feet, asphalt). He then remained in the traffic pattern to perform another takeoff and landing after which the engine experienced a total loss of engine power during initial climb. He reported that after the power loss, he leveled off approximately 50 feet above ground level and switched fuel tanks. The engine restarted, but lost power for a second time. He landed straight ahead, hitting a mound and then a tree. The airplane came to rest about 200 -300 yards west of the departure end of runway 09 on a field described by the pilot as "bad." The pilot then exited the airplane, got in his automobile, and left the accident site.

Inspection of the airplane by a Federal Aviation Administration inspector revealed black particles consistent with the airplane's rubber fuel hose material within the fuel system. The airplane was last fueled approximately a month prior to the accident.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	71, 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 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	July 1, 2003
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	April 12, 2003
<b>Flight Time:</b>	2287 hours (Total, all aircraft), 240 hours (Total, this make and model), 1200 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N72971
<b>Model/Series:</b>	140	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	10172
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	July 9, 2003 Annual	<b>Certified Max Gross Wt.:</b>	1450 lbs
<b>Time Since Last Inspection:</b>	2 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2267 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	C-85-12F
<b>Registered Owner:</b>	James L. Prior	<b>Rated Power:</b>	85 Horsepower
<b>Operator:</b>		<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>	Dusk
<b>Observation Facility, Elevation:</b>	RUE,403 ft msl	<b>Distance from Accident Site:</b>	20 Nautical Miles
<b>Observation Time:</b>	17:53 Local	<b>Direction from Accident Site:</b>	292°
<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>	4 knots / 0 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	160°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.97 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 19°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Morrilton, AR (BDQ )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Morrilton, AR (BDQ )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	17:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	MORRILTON MUNI BDQ	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	321 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	090	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4000 ft / 50 ft	<b>VFR Approach/Landing:</b>	None

## 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>	35.136112,-92.713607

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gallo, Mitchell
<b>Additional Participating Persons:</b>	Karry Ray; Federal Aviation Administration; Little Rock, AR
<b>Original Publish Date:</b>	September 1, 2004
<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=57692">https://data.ntsb.gov/Docket?ProjectID=57692</a>

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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](#).