



# Aviation Investigation Final Report

<b>Location:</b>	Atchison, Kansas	<b>Accident Number:</b>	CEN10LA281
<b>Date &amp; Time:</b>	May 29, 2010, 10:30 Local	<b>Registration:</b>	N76287
<b>Aircraft:</b>	Cessna 140	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

During takeoff the airplane's engine suddenly lost power. The pilot applied carburetor heat and switched fuel tanks; however, the engine did not restart. The pilot elected to conduct a forced landing along a road. During the forced landing, the airplane sustained structural damage. An examination of the airplane and engine was conducted; however, no abnormalities were found with either the airframe or engine that could account for the loss of engine power. While weather conditions for carburetor icing were noted as "moderate or serious icing - cruise or descent power range" at the time of the accident, the investigation was unable to determine the cause of the power loss.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undetermined reasons.

## Findings

<b>Aircraft</b>	(general) - Not specified
<b>Environmental issues</b>	Conducive to carburetor icing - Not specified

## Factual Information

### History of Flight

<b>Takeoff</b>	Loss of engine power (total) (Defining event)
<b>Landing</b>	Collision during takeoff/land

On May 29, 2010, about 1030 central daylight time, a single-engine Cessna 140 airplane, N76287, received substantial damage after a forced landing following a loss of engine power shortly after takeoff from the Amelia Earhart Airport (K59), Atchison, Kansas. The commercial rated pilot, sole occupant, was not injured. The airplane was registered to and operated by a private individual. Day visual meteorological conditions prevailed and no flight plan was filed for the 14 Code of Federal Regulations Part 91 personal flight.

In a telephone interview with the pilot, he stated that he had just departed K59, when the engine "just quit." He stated that he applied carburetor heat, and switched (fuel) tanks, to no avail. He then elected to conduct a force landing on a nearby road. During the hard landing the airplane's landing gear collapsed, and the airplane impacted and came to rest in a ditch.

An examination of the airplane was conducted by a Federal Aviation Administration (FAA) inspector. The inspector reported that fuel was visible in the left wing fuel tank; however, the amount of fuel in right wing fuel tank could not be verified, due to the way the airplane was sitting without its landing gear. Fuel sumped from each tank appeared clean and free of contaminates. Additionally, fuel was found in the engine's carburetor. The engine was rotated by hand and continuity thought the engine was verified. Both left and right magneto's appeared to function properly.

A review of the information found on a Carburetor Icing Probability Chart; and given the atmospheric conditions prevailing during take-off, revealed that the airplane was operating within the "moderate or serious icing - cruise or descent power" range.

A reason for the loss of engine power was not determined.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	66, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-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 With waivers/limitations	<b>Last FAA Medical Exam:</b>	April 10, 2009
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1379 hours (Total, all aircraft), 610 hours (Total, this make and model), 1379 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N76287
<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>	10701
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	May 10, 2009 Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3603 Hrs at time of accident	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	C91A installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	C85 SERIES
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	85 Horsepower
<b>Operator:</b>	On file	<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>	KSTJ	<b>Distance from Accident Site:</b>	16 Nautical Miles
<b>Observation Time:</b>	10:53 Local	<b>Direction from Accident Site:</b>	300°
<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>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	149°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.93 inches Hg	<b>Temperature/Dew Point:</b>	27°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Atchison, KS (K59)	<b>Type of Flight Plan Filed:</b>	Unknown
<b>Destination:</b>	Lee's Summit, MO (KLXT)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Amelia Earhart Airport K59	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	16	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3000 ft / 48 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>	39.559658,-95.129821(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hatch, Craig
<b>Additional Participating Persons:</b>	Bobby Warren; FAA FSDO; Wichita, KS
<b>Original Publish Date:</b>	August 12, 2010
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=76178">https://data.nts.gov/Docket?ProjectID=76178</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](#).