



# Aviation Investigation Final Report

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<b>Location:</b>	Kersey, Colorado	<b>Accident Number:</b>	DEN02LA040
<b>Date &amp; Time:</b>	April 28, 2002, 16:30 Local	<b>Registration:</b>	N787PC
<b>Aircraft:</b>	Cessna TR182	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot said that he flew direct from Longmont, Colorado to Ankeny, Iowa (533 nautical miles), and put 49.2 gallons of fuel in the airplane. On the return flight, he stopped at Hastings, Nebraska for food and a rest stop. He did not put additional fuel in the airplane during the rest stop. He departed for Longmont, Colorado, and experienced a power failure approximately 2.5 hours later; the pilot performed a forced landing to a highway. During the landing sequence, the pilot "extended the landing gear at the last second," and it failed to fully extend. The front door post bulk head was bent and the bottom of the airplane was badly damaged. The pilot said that the airplane held 92 gallons of fuel (88 gallons usable), but they customarily fueled it to the bottom of the fuel necks, which was approximately 65 gallons usable. A representative of the airplane's manufacturer said that the airplane burned approximately 14 to 15 gallons per hour in cruise flight, with 8 gallons being used for the two takeoffs and climbs to cruise altitude. The pilot also said the wind was strong from the west (maybe 30 knots), for the flight to Ankeny, and the return flight to Longmont.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's inadequate planning decision which led to fuel exhaustion and subsequent loss of engine power.

## Findings

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

### Findings

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

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

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Occurrence #3: WHEELS UP LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING

### Findings

3. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - ROADWAY/HIGHWAY

## Factual Information

On April 28, 2002, at approximately 1630 mountain daylight time, a Cessna TR182, N787PC, was substantially damaged during a gear up forced landing on a highway near Kersey, Colorado. The instrument rated private pilot and his two passengers were not injured. Air West Flight Center, Inc., of Longmont, Colorado, was operating the airplane under Title 14 CFR Part 91. Visual meteorological conditions prevailed for the personal cross-country flight that originated from Hastings, Nebraska, approximately 2.5 hours before the accident. The pilot had not filed a flight plan.

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### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	21, 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>	Airplane	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 None	<b>Last FAA Medical Exam:</b>	February 28, 2001
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	January 29, 2001
<b>Flight Time:</b>	230 hours (Total, all aircraft), 21 hours (Total, this make and model), 178 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N787PC
<b>Model/Series:</b>	TR182	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	R18200867
<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>	3100 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	O-540-J3C5D
<b>Registered Owner:</b>	Air West Flight Center Inc.	<b>Rated Power:</b>	235 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>	Day
<b>Observation Facility, Elevation:</b>	GXY,4697 ft msl	<b>Distance from Accident Site:</b>	12 Nautical Miles
<b>Observation Time:</b>	16:35 Local	<b>Direction from Accident Site:</b>	310°
<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>	18 knots / 26 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	300°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.95 inches Hg	<b>Temperature/Dew Point:</b>	22°C / -3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Hastings, NE (HSI )	<b>Type of Flight Plan Filed:</b>	Unknown
<b>Destination:</b>	Longmont, CO (2V2 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:00 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	40.351665,-104.46833

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Struhsaker, James
<b>Additional Participating Persons:</b>	Larry Rockhold; Federal Aviation Administration; Denver, CO
<b>Original Publish Date:</b>	April 1, 2003
<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=54615">https://data.nts.gov/Docket?ProjectID=54615</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](#).