



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Moran, WY	<b>Accident Number:</b>	DEN03LA148
<b>Date &amp; Time:</b>	09/01/2003, 1030 MDT	<b>Registration:</b>	N23108
<b>Aircraft:</b>	Cessna 150H	<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 he was performing a touch-and-go to a hayfield at his brother's ranch. The pilot said, "After rolling a short distance, I added full power and at the point of takeoff, hit a badger hole which jerked the aircraft." The pilot said he corrected to the left but was close to a low-lying area filled with willow bushes. The pilot said he lost airspeed and had the nose of the airplane up. He said he turned right to keep out of the higher willows. The pilot said the airplane mushed through the willows and struck the opposite bank of the low-lying area, causing substantial damage to both wings and separating the empennage from the aft fuselage. An examination of the airplane revealed no anomalies.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's selection of an unsuitable takeoff area which resulted in an encounter with the gopher hole during the touch-and-go. Factors contributing to the accident were the gopher hole, the abrupt pull up, the low airspeed, the inadvertent stall mush, the high vegetation, and the embankment.

## Findings

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Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

### Findings

1. TOUCH-AND-GO - PERFORMED
  2. (F) TERRAIN CONDITION - OTHER
  3. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF

### Findings

4. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  5. (F) PULL-UP - ABRUPT - PILOT IN COMMAND
  6. (F) AIRSPEED - LOW
  7. STALL/MUSH - INADVERTENT - PILOT IN COMMAND
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

### Findings

8. (F) TERRAIN CONDITION - HIGH VEGETATION
9. (F) TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

## Factual Information

On September 1, 2003, at 1030 mountain daylight time, a Cessna 150H, N23108, piloted by a private pilot, was substantially damaged during landing on a hayfield, 3-1/2 miles east of Moran, Wyoming. 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 pilot reported no injuries. The cross-country flight originated at Jackson, Wyoming, and was en route to Moran, Wyoming.

The pilot reported he was performing a touch-and-go to a hayfield at his brother's ranch. The pilot said, "After rolling a short distance, I added full power and at the point of takeoff, hit a badger hole which jerked the aircraft." The pilot said he corrected to the left but was close to a low-lying area filled with willow bushes. The pilot said he lost airspeed and had the nose of the airplane up. He said he turned right to keep out of the higher willows. The pilot said the airplane mushed through the willows and struck the opposite bank of the low-lying area.

An examination of the airplane showed the left wing tip leading edge broken aft. The right wing was bent aft and up. The aft fuselage was broken forward of the empennage. The propeller showed torsional bending and chordwise scratches. Flight control continuity was confirmed. An examination of the engine, engine controls, and other airplane systems revealed no anomalies.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	50, 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 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	01/29/2003
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	03/28/2003
<b>Flight Time:</b>	175 hours (Total, all aircraft), 40 hours (Total, this make and model), 120 hours (Pilot In Command, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N23108
Model/Series:	150H	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	15068730
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	10/02/2002, Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4035.7 Hours at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-200-A
Registered Owner:	Yellowstone Northern LCC	Rated Power:	100 hp
Operator:	Danny Lee Luton	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	JAC, 6447 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	1035 MDT	Direction from Accident Site:	200°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.35 inches Hg	Temperature/Dew Point:	13° C / 4° C
Precipitation and Obscuration:			
Departure Point:	Jackson, WY (JAC)	Type of Flight Plan Filed:	None
Destination:	Moran, WY	Type of Clearance:	None
Departure Time:	1000 MDT	Type of Airspace:	Class G

## Airport Information

Airport:	Hanson Ranch (Private)	Runway Surface Type:	Grass/turf
Airport Elevation:	7100 ft	Runway Surface Condition:	Dry
Runway Used:	090	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Touch and Go

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<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>	43.150000, -110.050000

## Administrative Information

<b>Investigator In Charge (IIC):</b>	David C Bowling	<b>Report Date:</b>	08/04/2004
<b>Additional Participating Persons:</b>	Bruce Hanson; Federal Aviation Administration; Casper, WY		
<b>Publish Date:</b>			
<b>Investigation Docket:</b>	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:pubinq@ntsb.gov">pubinq@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](#).