



# **Aviation Investigation Final Report**

Location: Canon City, Colorado Accident Number: DEN08LA028

Date & Time: October 29, 2007, 16:30 Local Registration: N2736P

Aircraft: Piper PA-22-150 Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

According to the pilot, he was practicing touch and go landings. During the sixth landing, he "felt a pop, and the airplane begin to settle on its right side." Subsequently, the airplane exited the right side of the runway, contacted terrain, and came to rest on its nose. The pilot reported no anomalies prior to the accident. Examination of the airplane revealed the right rear landing gear hinge point attachment had fractured, and the firewall was wrinkled. The reason for the hinge point attachment fracture was not determined.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the landing gear hinge point attachment for undetermined reasons.

#### **Findings**

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: LANDING - ROLL

**Findings** 

1. (C) LANDING GEAR, MAIN GEAR ATTACHMENT - FAILURE

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: LANDING - ROLL

Findings
2. TERRAIN CONDITION - GROUND

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#### **Factual Information**

On October 29, 2007, approximately 1630 mountain daylight time, a Piper PA-22-150 single-engine tailwheel airplane, N2736P, sustained substantial damage when it impacted terrain following a loss of control due to the failure of the right main landing gear strut during landing at Fremont County Airport (1V6), Canon City, Colorado. The commercial pilot and passenger were not injured. The personal flight was being conducted under the provisions of Title 14 Code of Federal Regulations Part 91 without a flight plan. Visual meteorological conditions prevailed at the time of the accident. The local flight originated from 1V6.

According to the pilot, he was practicing touch and go landings. During the sixth landing, he "felt a pop and the airplane begin to settle on its right side." Subsequently, the airplane exited the right side of the runway, contacted terrain, and came to rest on its nose. The pilot reported no anomalies prior to the accident, and he had accumulated 325 flight hours in the accident airplane.

The pilot reported the airplane underwent its most recent annual inspection in November 2006.

Examination of the airplane revealed the right rear landing gear hinge point attachment had fractured, and the firewall was wrinkled.

The reason for the hinge point attachment fracture was not determined.

#### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	43,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	November 1, 2005
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 1, 2007
Flight Time:	739 hours (Total, all aircraft), 325 hours (Total, this make and model), 739 hours (Pilot In Command, all aircraft), 251 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

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## **Aircraft and Owner/Operator Information**

Ainquest Makes	Dinor	Domintuntions	NO726D
Aircraft Make:	Piper	Registration:	N2736P
Model/Series:	PA-22-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-3043
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	November 1, 2006 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	42 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-A1A
Registered Owner:	Thomas Van Acker	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FCS,5838 ft msl	Distance from Accident Site:	22 Nautical Miles
Observation Time:	16:55 Local	Direction from Accident Site:	35°
<b>Lowest Cloud Condition:</b>	Few / 15000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 20000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.27 inches Hg	Temperature/Dew Point:	21°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Canon City, CO (1V6)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	16:30 Local	Type of Airspace:	

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## **Airport Information**

Airport:	Fremont County Airport 1V6	Runway Surface Type:	Asphalt
Airport Elevation:	5440 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	11	IFR Approach:	None
Runway Length/Width:	5399 ft / 75 ft	VFR Approach/Landing:	Touch and go;Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	38.423332,-105.103614

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#### **Administrative Information**

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	James Clayville; FAA-Denver FSDO; Denver, CO
Original Publish Date:	January 31, 2008
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=67075

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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.

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