



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Jeffersonville, IN	<b>Accident Number:</b>	CHI03LA032
<b>Date &amp; Time:</b>	12/01/2002, 1138 EST	<b>Registration:</b>	N15723
<b>Aircraft:</b>	Piper PA-34-200	<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 main landing gear collapsed during landing rollout. The pilot reported that when he selected 'gear down' the in-transit light illuminated and when the landing gear had extended the three landing gear position lights illuminated. The pilot reported the in-transit light did not remain illuminated after the landing gear had extended. The pilot stated there was "no gear warning indication or horn sounding." The pilot reported a normal landing was made and prior to the first taxiway both main landing gear collapsed. The pilot stated when the main landing gear collapsed the in-transit light illuminated and landing gear warning horn sounded. The pilot reported the three landing gear position lights remained illuminated after the aircraft came to rest. The airplane was elevated for an operational test of the landing gear. During normal gear extension the nose and right main landing gear extended as designed. The left main landing gear extended approximately 3/4 down before becoming mechanically bound. The nose and right main landing gear position lights illuminated. The left main landing gear position light did not illuminate. The left main landing gear could be forced into the down-and-locked position and the gear position light would illuminate. The linkage between the left oleo strut assembly and the gear was corroded and dirt was present on the landing gear position switches. The linkage was disconnected and the left main landing gear moved freely.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The mechanical binding of the left main landing gear, which resulted in the left main landing gear not fully extending to the down-and-locked position. Factors to the accident were the oleo-strut linkage being corroded and the contamination of the gear position switches.

## Findings

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Occurrence #1: GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

### Findings

1. (C) LANDING GEAR,MAIN GEAR - COLLAPSED
2. (C) LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - BINDING(MECHANICAL)
3. (F) LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - CORRODED
4. (F) LANDING GEAR,GEAR INDICATING SYSTEM - CONTAMINATION

## Factual Information

On December 1, 2002, at 1138 eastern standard time, a Piper PA-34-200, N15723, piloted by a commercial pilot, sustained substantial damage when the landing gear collapsed while landing on runway 18 (5,500 feet by 100 feet, dry/asphalt) at the Clark County Airport (JVY), Jeffersonville, Indiana. Visual meteorological conditions prevailed at the time of the accident. The flight was operating under the provisions of 14 CFR Part 91 without a flight plan. The flight departed the Bowman Field Airport (LOU), Louisville, Kentucky, at 1045.

According to the pilot's written statement, when he selected 'gear down' the in-transit light illuminated and when the landing gear had extended the three landing gear position lights illuminated. The pilot reported the in-transit light did not remain illuminated after the landing gear had extended. The pilot stated there was "no gear warning indication or horn sounding." The pilot reported a normal landing was made and prior to the first taxiway both main landing gear collapsed. The pilot stated when the main landing gear collapsed the in-transit light illuminated and landing gear warning horn sounded. The aircraft came to rest at the intersection of runways 18 and 32. The pilot reported the three landing gear position lights remained illuminated after the aircraft came to rest.

The airplane was elevated for an operational test of the landing gear. During normal gear extension the nose and right main landing gear extended as designed. The left main landing gear extended approximately 3/4 down before becoming mechanically bound. The nose and right main landing gear position lights illuminated. The left main landing gear position light did not illuminate. The left main landing gear could be forced into the down-and-locked position and the gear position light would illuminate. The linkage between the left oleo strut assembly and the gear was corroded and dirt was present on the landing gear position switches. The linkage was disconnected and the left main landing gear moved freely.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	34, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; 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>	Airplane	<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--no waivers/lim.	<b>Last FAA Medical Exam:</b>	11/20/2000
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	08/23/2001
<b>Flight Time:</b>	834 hours (Total, all aircraft), 515 hours (Total, this make and model), 743 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N15723
<b>Model/Series:</b>	PA-34-200	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	34-7350136
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	06/24/2002, 100 Hour	<b>Certified Max Gross Wt.:</b>	4200 lbs
<b>Time Since Last Inspection:</b>	60 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	7177 Hours at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360-C1E6
<b>Registered Owner:</b>	Russell Edward Sloan	<b>Rated Power:</b>	200 hp
<b>Operator:</b>	Russell Edward Sloan	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	LOU, 546 ft msl	<b>Distance from Accident Site:</b>	9 Nautical Miles
<b>Observation Time:</b>	1153 EST	<b>Direction from Accident Site:</b>	157°
<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>	9 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	280°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.24 inches Hg	<b>Temperature/Dew Point:</b>	-2° C / -12° C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Louisville, KY (LOU)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Jeffersonville, IN (JVY)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	1045 EST	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Clark County Airport (JVY)	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	474 ft	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5500 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full Stop; Traffic Pattern

## 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>	38.365000, -85.738333

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Andrew T Fox	<b>Report Date:</b>	09/30/2003
<b>Additional Participating Persons:</b>	Joe P Fisher; FAA - Indianapolis FSDO; Indianapolis, IN		
<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.ntsbt.gov/pubdms/">http://dms.ntsbt.gov/pubdms/</a> .		

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