



# National Transportation Safety Board Aviation Incident Data Summary

<b>Location:</b>	Hillsboro, OR	<b>Incident Number:</b>	LAX08IA093
<b>Date &amp; Time:</b>	04/02/2008, 1423 PDT	<b>Registration:</b>	N456
<b>Aircraft:</b>	Bennett Lancair 320	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

While in cruise flight, the airplane lost electrical power. The pilot went through emergency procedures to conserve electrical power, and returned to the airport. He attempted to extend the electrically operated landing gear, but only heard the right main gear come down and lock. There was no emergency gear extension system available on the airplane. Air traffic controllers in the airport tower later confirmed that the gear did not appear to be in the normal down and locked position. The pilot landed on runway 30, the nose and left main gear collapsed, and the right main gear snapped off. The airplane went off the left side of the runway onto the grass, shearing off an intersection marker and causing substantial damage to the wing spar. Postaccident examination revealed that the battery had a dead cell, and the alternator had several discrepancies.

## Flight Events

Enroute-cruise - Sys/Comp malf/fail (non-power)  
Landing-landing roll - Landing gear collapse  
Landing-landing roll - Collision with terr/obj (non-CFIT)

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be:  
The malfunction of the airplane's battery and alternator that resulted in the failure of the landing gear to extend and lock in place.

## Findings

Aircraft-Aircraft systems-Electrical power system-Battery/charger-Malfunction - C  
Aircraft-Aircraft systems-Electrical power system-Alternator-generator drive sys-Malfunction - C  
Aircraft-Aircraft systems-Landing gear system-Gear extension and retract sys-Inoperative  
Environmental issues-Physical environment-Object/animal/substance-Sign/marker-Not specified

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	55
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	300 hours (Total, all aircraft), 200 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	Bennett	<b>Registration:</b>	N456
<b>Model/Series:</b>	Lancair 320	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	On file	<b>Engine Manufacturer:</b>	Lycoming
<b>Air Carrier Operating Certificate:</b>	None	<b>Engine Model/Series:</b>	0-320
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	HIO, 208 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	None
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	Calm
<b>Temperature:</b>	12°C / -1°C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Hillsboro, OR (HIO)	<b>Destination:</b>	

## Airport Information

<b>Airport:</b>	PORTLAND-HILLSBORO (HIO)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	30	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	6600 ft / 150 ft		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Howard D Plagens	<b>Adopted Date:</b>	08/28/2008
<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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