



# Aviation Investigation Final Report

<b>Location:</b>	Heber City, Utah	<b>Accident Number:</b>	WPR12LA290
<b>Date &amp; Time:</b>	June 24, 2012, 10:30 Local	<b>Registration:</b>	N117Z
<b>Aircraft:</b>	BURLEIGH BEARHAWK	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that shortly after touchdown and during the landing roll, the airplane ground looped to the left. A postaccident examination of the landing gear system revealed no evidence of mechanical malfunction or failure that would have precluded normal operation.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain directional control during the landing roll, which resulted in a ground loop.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained

## Factual Information

### History of Flight

#### Landing-landing roll

Loss of control on ground (Defining event)

On June 24, 2012, about 1030 mountain daylight time, a Burleigh Bearhawk amateur built airplane, N117Z, ground looped during the landing roll at the Heber City Municipal Airport, Heber City, Utah. The pilot, who additionally owned the airplane, was operating it under the provisions of 14 Code of Federal Regulations (CFR) Part 91. The airline transport pilot and two passengers were not injured; the airplane sustained substantial damage. The local personal flight departed from Heber City about 1000. Visual meteorological conditions prevailed, and no flight plan had been filed.

The pilot stated that after a 30-minute local flight he returned back to the airport to land. Shortly after touchdown and during the landing roll, the airplane ground looped to the left. The airplane sustained substantial damage to the left wing spar.

The pilot further stated that he believed that he lost controllability due to a tailwheel malfunction. He noted that he had experienced prior problems with the tailwheel shimmying.

A Federal Aviation Administration (FAA) airworthiness inspector performed an examination of the wreckage and found no evidence of mechanical malfunction or failure with the landing gear system. He noted that if there was some shimmy or it had spun around, it would still be possible to control the airplane.

A routine aviation weather report (METAR) for Provo Municipal Airport, Provo, Utah, about 20 miles from the accident on a bearing of about 220 degrees, reported that the wind was from 100 degrees at 4 knots about 20 minutes after the accident.

## Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	55, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	January 1, 2012
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	January 27, 2012
<b>Flight Time:</b>	15816 hours (Total, all aircraft), 64 hours (Total, this make and model), 8166 hours (Pilot In Command, all aircraft), 96 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BURLEIGH	<b>Registration:</b>	N117Z
<b>Model/Series:</b>	BEARHAWK	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	087-1039
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	April 2, 2012 Condition	<b>Certified Max Gross Wt.:</b>	2500 lbs
<b>Time Since Last Inspection:</b>	21 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	212 Hrs at time of accident	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-540-A4D5
<b>Registered Owner:</b>	M & E ADVENTURES LLC	<b>Rated Power:</b>	250 Horsepower
<b>Operator:</b>	Edwin Thiel	<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>	PVU,4497 ft msl	<b>Distance from Accident Site:</b>	21 Nautical Miles
<b>Observation Time:</b>	10:49 Local	<b>Direction from Accident Site:</b>	221°
<b>Lowest Cloud Condition:</b>	Few / 1400 ft AGL	<b>Visibility</b>	15 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	100°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.03 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Heber, UT (36U)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Heber, UT (36U)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:00 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Heber City Municipal Airport 36U	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	5637 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	04	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6899 ft / 75 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>	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>	40.481666,-111.428611(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Keliher, Zoe
<b>Additional Participating Persons:</b>	Scott Hartley; Federal Aviation Administration; Salt Lake City, UT
<b>Original Publish Date:</b>	September 5, 2013
<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=84170">https://data.nts.gov/Docket?ProjectID=84170</a>

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