

Aviation Investigation Final Report

RAILROAD

PIPELINE

Location:	Heber City, Utah	Accident Number:	WPR12LA290
Date & Time:	June 24, 2012, 10:30 Local	Registration:	N117Z
Aircraft:	BURLEIGH BEARHAWK	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	3 None
Flight Conducted Under:	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	
Personnel issues	Aircraft control - Pilot
Aircraft	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

Certificate:	Airline transport	Age:	55,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	January 1, 2012
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	January 27, 2012
Flight Time:	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

Aircraft Make:	BURLEIGH	Registration:	N117Z
Model/Series:	BEARHAWK	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	087-1039
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	April 2, 2012 Condition	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:	21 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	212 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-540-A4D5
Registered Owner:	M & E ADVENTURES LLC	Rated Power:	250 Horsepower
Operator:	Edwin Thiel	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PVU,4497 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	10:49 Local	Direction from Accident Site:	221°
Lowest Cloud Condition:	Few / 1400 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	28°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Heber, UT (36U)	Type of Flight Plan Filed:	None
Destination:	Heber, UT (36U)	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	

Airport Information

Airport:	Heber City Municipal Airport 36U	Runway Surface Type:	Asphalt
Airport Elevation:	5637 ft msl	Runway Surface Condition:	Dry
Runway Used:	04	IFR Approach:	None
Runway Length/Width:	6899 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	40.481666,-111.428611(est)

Administrative Information

Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Scott Hartley; Federal Aviation Administration; Salt Lake City, UT
Original Publish Date:	September 5, 2013
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=84170

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.