Aviation Investigation Final Report

Location:	Port Angeles, Washington	**Accident Number:**	SEA06CA157
Date & Time:	August 5, 2006, 11:30 Local	**Registration:**	N347JP
Aircraft:	Piggott Bearhawk	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot said that he had done several stop-and-go landings; he then made a full stop for a respite. When he taxied out for his next departure on runway 08, he experienced no steering problems. As he took off, the airplane vibrated briefly. The pilot performed another landing and had a firm touchdown. He said the aircraft immediately veered left and full right rudder had no effect. He said that his feet had slipped off the aircraft's toe brakes during the landing, so differential braking was not possible. The right main landing gear collapsed, and the right wing and aileron were bent. Postaccident examination of the tail wheel assembly revealed that the clevis which connected the left tail wheel spring to the wheel's steering arm was missing. Additionally, serpentine skid marks where found on the runway that appeared to be the result of a tailwheel shimmy. The pilot reported that the wind during his first landing was from 350 degrees at 6 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of directional control as a result of the disconnected tail wheel steering system, which led to an inadvertent ground loop during the landing roll.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF - ROLL/RUN

Findings
1. (C) LANDING GEAR,STEERING SYSTEM - DISCONNECTED

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings
2. (C) DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND
3. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings
4. TERRAIN CONDITION - RUNWAY

Factual Information

On August 5, 2006, at approximately 1130 Pacific daylight time, a Piggott Bearhawk experimental homebuilt airplane, N347JP, was substantially damaged during a ground loop event while landing at William R. Fairchild International Airport (CLM), Port Angeles, Washington. The airline transport pilot, the sole occupant on board, was not injured. The airplane was being operated under Title 14 CFR Part 91. Visual meteorological conditions prevailed for the personal local flight which had originated approximately 5 minutes before the accident. The pilot had not filed a flight plan.

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Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	**Age:**	72,Male
Airplane Rating(s):	Single-engine land; Multi-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 With waivers/limitations	**Last FAA Medical Exam:**	June 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	November 1, 2005
Flight Time:	8218 hours (Total, all aircraft), 4 hours (Total, this make and model), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piggott	**Registration:**	N347JP
Model/Series:	Bearhawk	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	347
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	Condition	**Certified Max Gross Wt.:**	2400 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	50 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-540
Registered Owner:	Daniel E. Donovan	**Rated Power:**	235 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:	CLM,291 ft msl	**Distance from Accident Site:**	
Observation Time:	11:53 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	350°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.09 inches Hg	**Temperature/Dew Point:**	19°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Port Angeles, WA (CLM)	**Type of Flight Plan Filed:**	None
Destination:	Sequim, WA (W28)	**Type of Clearance:**	None
Departure Time:	11:25 Local	**Type of Airspace:**	

Airport Information

Airport:	Fairchild Inter Arpt CLM	**Runway Surface Type:**	Asphalt
Airport Elevation:	291 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	08	**IFR Approach:**	None
Runway Length/Width:	6347 ft / 150 ft	**VFR Approach/Landing:**	Stop and go

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	48.020793,-123.819519(est)

Administrative Information

Investigator In Charge (IIC):	Struhsaker, James
Additional Participating Persons:	Patrick Paden; FAA FSDO; Seattle, WA
Original Publish Date:	November 29, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64305