Aviation Investigation Final Report

Location:	Townsend, Montana	**Accident Number:**	SEA08CA009
Date & Time:	October 10, 2007, 10:50 Local	**Registration:**	N1139C
Aircraft:	Piper PA-22/20	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor stated that the purpose of the flight was for the private pilot/owner to receive instruction for the tailwheel endorsement. After practicing several successful takeoffs and landings, the flight instructor had the private pilot set-up for a full stop wheel landing to runway 16, which had a six knot, 45 degree crosswind. While in ground effect, the private pilot reduced the throttle too fast, which increased the sink rate and the aircraft touched down firmly on the mains. The private pilot arrested the bounce with forward pressure before the aircraft lifted off, and applied some power to maintain directional control. The aircraft then began to make an excursion from the runway centerline and the private pilot lowered the tail which made the aircraft unstable. The flight instructor then assisted the private pilot and stabilized the aircraft. The private pilot then indicated that he could handle the situation, and the flight instructor returned control back to the private pilot. The flight instructor stated that he may have returned control back to the private pilot too quickly, as the situation degraded to large excursion from centerline, and the aircraft diverted from normal track. The flight instructor was not able to regain directional control and the aircraft ground looped to the left. During the ground loop, the right wing and elevator contacted the ground and were structurally damaged.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The private pilot/student failed to maintain directional control during the landing roll, and remedial action was not possible by the flight instructor which resulted in an inadvertent ground loop.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings
1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - DUAL STUDENT
2. (C) REMEDIAL ACTION - NOT POSSIBLE - PILOT IN COMMAND(CFI)
3. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND(CFI)

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings
4. TERRAIN CONDITION - GROUND

Factual Information

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Flight instructor Information

Certificate:	Commercial; Flight instructor	**Age:**	0,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	
Other Aircraft Rating(s):	Glider	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):		**Toxicology Performed:**	No
Medical Certification:	Class 2	**Last FAA Medical Exam:**	December 1, 2006
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	5942 hours (Total, all aircraft), 10 hours (Total, this make and model), 121 hours (Last 90 days, all aircraft), 34 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N1139C
Model/Series:	PA-22/20	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	22-975
Landing Gear Type:	Tailwheel	**Seats:**	
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:		**Engine Model/Series:**	O-320
Registered Owner:	Douglas S. Cairns	**Rated Power:**	
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	30 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	130°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Canyon Ferry, MT (8U9)	**Type of Flight Plan Filed:**	None
Destination:	Townsend, MT (8U8)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:	Townsend 8U8	**Runway Surface Type:**	Asphalt
Airport Elevation:	3893 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	16	**IFR Approach:**	None
Runway Length/Width:	4000 ft / 60 ft	**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	
Total Injuries:	2 None	**Latitude, Longitude:**	46.480957,-111.339103(est)

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	Derek Amos; FAA/FSDO; Helena, MT
Original Publish Date:	December 20, 2007
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=66881