

Aviation Investigation Final Report

Location:	Bozeman, Montana	Accident Number:	SEA01LA047
Date & Time:	February 8, 2001, 14:20 Local	Registration:	N7940H
Aircraft:	Piper PA-12	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot rated passenger and prospective buyer of the tailwheel equipped Piper PA-12, was flying the aircraft from the front seat with the owner occupying the rear seat. During a touchand-go landing the aircraft veered right and then hard left, during which the pilot (passenger) attempted to correct with rudder and the addition of power. The aircraft then ran off the left side of the runway into a snowberm and nosed over. The flying pilot reported 81 hours of flight experience in the PA-12. Calm winds existed at the time of the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot rated passenger's failure to maintain directional control during the landing. A factor was the snow berm which the aircraft rolled into during the landing.

Findings

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

Findings
1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT PASSENGER

Occurrence #2: NOSE OVER Phase of Operation: LANDING - ROLL

Findings 2. (F) TERRAIN CONDITION - SNOWBANK

Factual Information

On February 8, 2001, approximately 1420 mountain standard time, a Piper PA-12, N7940H, registered to and operated by a private pilot, and being flown by a commercial pilot, was substantially damaged following a loss of control and nose over during a touch-and-go landing at Gallatin Field, Bozeman, Montana. Both pilots aboard were uninjured. Visual meteorological calm wind conditions existed and no flight plan had been filed. The flight, which was reported to be a pre-sale checkout, was operated under 14CFR91, and originated from Bozeman's Gallatin Field approximately one hour earlier.

The commercially certificated prospective buyer, occupying the front seat, reported that he was executing a touch-and-go landing to runway 12. After a normal approach at 60 miles per hour and full flaps the aircraft touched down. The pilot reported that the aircraft "...veered right, then hard left..." and that he "...attempted to correct with full right rudder...." He then "...applied full power in an attempt to get [the] acft flying..." and that the aircraft "...left [the] rwy below flying speed, the tires sank into the snow, [the] acft tipped up on the nose & then onto its back...." The pilot reported nearly 81 hours of flight experience in the PA-12 aircraft.

The privately certificated owner, occupying the rear seat, reported that after a touch-and-go landing on runway 12, a second approach and landing was executed. The owner reported that on the second landing "...we initially were pointed too far right and I believe Ed over-corrected and ended up pointing left toward the edge of the runway. Ed added power to go around and tried to take off before we ran off the left side of the runway. We didn't get off the ground before hitting the edge of the runway (and fairly deep snow) and the snow slowed us down and then stopped us causing the airplane to roll over forward and upside down...."

Phot information			
Certificate:	Commercial; Flight instructor	Age:	61,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 29, 1999
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 15, 2000
Flight Time:	1258 hours (Total, all aircraft), 81 hours (Total, this make and model), 1221 hours (Pilot In Command, all aircraft)		

Pilot Information

Other flight crew Information

Certificate:	Age:	
Airplane Rating(s):	Seat Occupied:	
Other Aircraft Rating(s):	Restraint Used:	
Instrument Rating(s):	Second Pilot Present:	Yes
Instructor Rating(s):	Toxicology Performed:	No
Medical Certification:	Last FAA Medical Exam:	
Occupational Pilot:	Last Flight Review or Equivalent:	
Flight Time:		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7940H
Model/Series:	PA-12	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	12-844
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 1, 2000 Annual	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	7300 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	0-320
Registered Owner:	Chandler, Douglas S.	Rated Power:	150 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:	BZN,4474 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	13:56 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	-17°C / -22°C
Precipitation and Obscuration:			
Departure Point:	Bozeman, MT (BZN)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	Traffic advisory
Departure Time:	13:20 Local	Type of Airspace:	Class D

Airport Information

Airport:	Gallatin Field BZN	Runway Surface Type:	Asphalt
Airport Elevation:	4474 ft msl	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	9003 ft / 150 ft	VFR Approach/Landing:	Touch and go;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	45.810184,-111.149703(est)

Administrative Information

Investigator In Charge (IIC):	Mccreary, Steven
Additional Participating Persons:	Ed Warmoth; Federal Aviation Administration (Helena FSDO); Helena, MT
Original Publish Date:	July 30, 2001
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51464

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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.