



National Transportation Safety Board Aviation Accident Final Report

Location:	Del Norte, CO	Accident Number:	CEN12CA132
Date & Time:	01/02/2012, 1350 MDT	Registration:	N9952Q
Aircraft:	PIPER PA-18-135	Aircraft Damage:	Substantial
Defining Event:	Runway excursion	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The pilot, who held a private pilot certificate, was receiving dual instruction from a certified flight instructor (CFI) to become familiar with his newly acquired tailwheel-equipped airplane. After practicing some standard flight maneuvers at altitude, the pilot returned to the departure airport to practice full stop landings and takeoffs. The CFI demonstrated the first landing, and then the pilot performed the next four landings and takeoffs with the CFI monitoring the controls and providing assistance when necessary. The CFI stated that the pilot's first landing was normal, the second landing required minor directional control assistance, the third landing required no assistance, and the fourth landing required some assistance from the base leg to final approach but the landing and roll were normal. On the fifth landing, the pilot made a nice three-point touchdown and rolled straight ahead. During the landing roll, the airplane suddenly swerved to the right and the CFI noticed that the pilot had already applied full left corrective rudder. The CFI then applied the left brake, but the application was ineffective. He then applied right brake to slow the airplane's pending departure off the runway. The airplane nosed over and came to rest in a snow bank that was bordering the runway. The top of the rudder sustained substantial damage.

The airplane was equipped with a supplemental type certificate non-standard brake system. The CFI stated that, when he had ferried the airplane, he noted that the brake system was extremely sensitive. The CFI stated that he told the pilot early in his instruction that the use of the brakes should be avoided in normal operations due to their sensitivity. The CFI stated that he believes that the sensitivity of the brake system was a causal factor in the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's loss of directional control during the landing roll, which resulted in a runway excursion. Contributing to the accident were the sensitivity of the brake system and the certified flight instructor pilot's delayed remedial action.

Findings

Aircraft	Landing gear brakes system - Not specified (Factor) Directional control - Not attained/maintained (Cause)
Personnel issues	Incorrect action performance - Pilot (Cause) Delayed action - Instructor/check pilot (Factor)

Factual Information

History of Flight

Landing-landing roll	Nose over/nose down Runway excursion (Defining event)
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Pilot Information

Certificate:	Private	Age:	54, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last Medical Exam:	08/14/1990
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	425 hours (Total, all aircraft), 3 hours (Total, this make and model), 3 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Flight Instructor Information

Certificate:	Flight Instructor; Private	Age:	46, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Without Waivers/Limitations	Last Medical Exam:	03/03/2010
Occupational Pilot:	No	Last Flight Review or Equivalent:	12/29/2011
Flight Time:	9040 hours (Total, all aircraft), 93 hours (Total, this make and model), 7850 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N9952Q
Model/Series:	PA-18-135	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	18-3579
Landing Gear Type:		Seats:	2
Date/Type of Last Inspection:	05/15/2011, Annual	Certified Max Gross Wt.:	1950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3962 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-B2B
Registered Owner:	Jimmy K. Adelman	Rated Power:	160 hp
Operator:	Jimmy K. Adelman	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:		Observation Time:	
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	-3° C
Lowest Ceiling:	None	Visibility	25 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:		Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Del Norte, CO (8V1)	Type of Flight Plan Filed:	Unknown
Destination:	Del Norte, CO (8V1)	Type of Clearance:	None
Departure Time:	1330 MDT	Type of Airspace:	Class G

Airport Information

Airport:	Del Norte Kent Rominger Field (8V1)	Runway Surface Type:	Asphalt
Airport Elevation:	7850 ft	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	6050 ft / 75 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None		

Administrative Information

Investigator In Charge (IIC):	Alexander Lemishko	Adopted Date:	03/08/2012
Additional Participating Persons:	Thomas Kempfer; FAA FSDO; Denver, CO		
Publish Date:	03/08/2012		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=82672		

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