



National Transportation Safety Board Aviation Accident Final Report

Location:	Loveland, CO	Accident Number:	CEN14CA055
Date & Time:	11/02/2013, 1545 MDT	Registration:	N6303E
Aircraft:	CESSNA 172N	Aircraft Damage:	Substantial
Defining Event:	Sys/Comp malf/fail (non-power)	Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The flight instructor and pilot receiving instruction were landing a tailwheel-equipped airplane. The instructor reported that after touchdown the airplane veered to the right. He took control of the airplane and applied full left rudder and left brake. The airplane tracked straight for a moment before it turned right and departed the runway. The left main landing gear collapsed and the left wing impacted the ground. Examination of the airplane's right brake rotor revealed heat damage (bluing) of the rotor and substantial damage to the airplane's wing and fuselage. The instructor noted that the other pilot did not appear to make any control inputs that would have resulted in a right turn.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A dragging right brake, which resulted in an un-commanded right turn, and subsequent ground loop.

Findings

Aircraft	Brake - Malfunction (Cause)
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Factual Information

History of Flight

Landing	Sys/Comp malf/fail (non-power) (Defining event) Runway excursion Dragged wing/rotor/float/other
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Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	34
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Helicopter; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last Medical Exam:	01/22/2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	05/01/2012
Flight Time:	5436 hours (Total, all aircraft), 52 hours (Total, this make and model), 5294 hours (Pilot In Command, all aircraft), 80 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft)		

Student Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	35
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last Medical Exam:	07/15/2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1543 hours (Total, all aircraft), 1 hours (Total, this make and model), 1216 hours (Pilot In Command, all aircraft), 36 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N6303E
Model/Series:	172N N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17272005
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	0-320 SERIES
Registered Owner:	CATE KYLE T	Rated Power:	0 hp
Operator:	Low Pressure Aviation	Air Carrier Operating Certificate:	None
Operator Does Business As:	Leading Edge Flight Training	Operator Designator Code:	

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KFNL	Observation Time:	1355 MDT
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:	14° C / -1° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	3 knots, 250°	Visibility (RVR):	
Altimeter Setting:	29.95 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Loveland, CO (KFNL)	Type of Flight Plan Filed:	None
Destination:	Loveland, CO (KFNL)	Type of Clearance:	None
Departure Time:	MDT	Type of Airspace:	

Airport Information

Airport:	Fort Collins Loveland (KFNL)	Runway Surface Type:	Asphalt
Airport Elevation:	5016 ft	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	8500 ft / 100 ft	VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Minor, 1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None		

Administrative Information

Investigator In Charge (IIC):	Craig Hatch	Adopted Date:	02/04/2014
Additional Participating Persons:	John J Muldoon; FAA FSDO; Denver, CO		
Publish Date:	02/04/2014		
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=88432		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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