



National Transportation Safety Board Aviation Accident Data Summary

Location:	Jackson, TN	Accident Number:	ERA10LA131
Date & Time:	02/03/2010, 1348 CST	Registration:	N97075
Aircraft:	CESSNA 172	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The student pilot landed, taxied back to the runway, and departed again. She stayed in the traffic pattern and then landed again with a slight crosswind at about 3 knots. During the subsequent takeoff with full power, the airplane veered to the left. The student pilot applied right rudder, but the airplane continued to the left and veered into a snow bank. A postaccident examination of the airplane's nose landing gear revealed that the right bearing rod-end had broken off the arm assembly of the nose gear steering rod. Further examination of both components through magnified optics revealed deformation and fracture surface features consistent with bending overstress separations in both components. No indications of preexisting conditions, such as fatigue or corrosion, were found.

Flight Events

Takeoff - Loss of control on ground
Takeoff - Ground collision

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
The student pilot's loss of directional control during the takeoff roll, which resulted in a collision with a snow bank.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Directional control-Not attained/maintained - C

Personnel issues-Task performance-Use of equip/info-Aircraft control-Student pilot - C

Student Pilot Information

Certificate:	Student	Age:	16
Airplane Rating(s):	None	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	35 hours (Total, all aircraft), 35 hours (Total, this make and model), 35 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N97075
Model/Series:	172 P	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	LYCOMING
Air Carrier Operating Certificate:	None	Engine Model/Series:	O360-A4M
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	MKL, 434 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	3 knots, 320°
Temperature:	6°C / -2°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Jackson, TN (MKL)	Destination:	Jackson, TN (MKL)

Airport Information

Airport:	McKellar-Sipes Regional (MKL)	Runway Surface Type:	Asphalt
Runway Used:	02	Runway Surface Condition:	Dry
Runway Length/Width:	6006 ft / 150 ft		

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Ralph L Wilson	Adopted Date:	04/12/2011
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=75337		

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