



National Transportation Safety Board Aviation Accident Final Report

Location:	Frederick, MD	Accident Number:	ERA12LA061
Date & Time:	11/02/2011, 1715 EDT	Registration:	N212CF
Aircraft:	CESSNA 172R	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

After touchdown, with a left crosswind of about 6 knots, the student pilot reported a strong vibration in the wheels and a pull to the left. He applied power to abort the landing, but did not maintain directional control, and, as a result, the airplane departed the left side of the runway, collapsing the nose landing gear. Postaccident inspection of the nose landing gear shimmy damper revealed no evidence of preimpact failure or malfunction.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's inadequate directional control during the landing roll.

Findings

Aircraft	Directional control - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Student pilot (Cause)

Factual Information

On November 2, 2011, about 1715 eastern daylight time, a Cessna 172R, N212CF, registered to FL Flyers LLC, operated by Frederick Flight Center, experienced a loss of control during landing at Frederick Municipal Airport (FDK), Frederick, Maryland. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 Code of Federal Regulations (CFR) Part 91 instructional flight from Carroll County Regional Airport/Jack B Poage Field (DMW), Westminster, Maryland. The airplane sustained substantial damage, and the student pilot, the sole occupant, sustained minor injuries. The flight originated about 20 minutes earlier from DMW.

The student pilot stated that the accident flight was his fourth solo flight. He departed FDK and flew to DMW where he performed a full-stop landing. He later reported noticing a "slight shutter in the wheels during the landing roll but no steering issue was noticed." He departed to return to FDK, and entered the traffic pattern for landing on runway 23. He reported that the approach was flown at 70 knots, and after a smooth touchdown, he reported that almost immediately he, "...felt a strong vibration in the wheels and a pull to the left...." He applied power to go around, and attempted to keep the longitudinal axis of the airplane aligned with the runway but the airplane veered to the left and departed the left side of the runway. The airplane came to an abrupt stop with the nose pitched into the ground.

Postaccident inspection of the airplane and airport were performed by a Federal Aviation Administration airworthiness inspector. The inspector reported that black marks on the runway were noted to the runway edge, consistent with brake application. Inspection of the airplane revealed that the nose landing gear was folded under the airplane, and further inspection of the nose landing gear shimmy damper revealed no evidence of preimpact failure or malfunction.

A surface observation weather report taken at the accident airport at 1710, or approximately 5 minutes before the accident indicates in part that the wind was from 160 degrees at 6 knots.

History of Flight

Landing-landing roll	Miscellaneous/other
Landing-aborted after touchdown	Loss of control on ground (Defining event)

Student Pilot Information

Certificate:	None	Age:	56, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	07/13/2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	45 hours (Total, all aircraft), 45 hours (Total, this make and model), 6 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N212CF
Model/Series:	172R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	17280418
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	10/27/2011, 100 Hour	Certified Max Gross Wt.:	2457 lbs
Time Since Last Inspection:	12 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4197 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-360-L2A
Registered Owner:	FL FLYERS LLC	Rated Power:	160 hp
Operator:	Frederick Flight Center, Inc.	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	FDK, 303 ft msl	Observation Time:	1710 EDT
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Scattered / 6500 ft agl	Temperature/Dew Point:	16 °C / 3 °C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	6 knots, 160°	Visibility (RVR):	
Altimeter Setting:	30.29 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Westminster, MD (DMW)	Type of Flight Plan Filed:	None
Destination:	Frederick, MD (FDK)	Type of Clearance:	None
Departure Time:	1655 EDT	Type of Airspace:	

Airport Information

Airport:	Frederick Municipal Airport (FDK)	Runway Surface Type:	Asphalt
Airport Elevation:	303 ft	Runway Surface Condition:	Dry
Runway Used:	23	IFR Approach:	None
Runway Length/Width:	5220 ft / 100 ft	VFR Approach/Landing:	Go Around; Traffic Pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Timothy W Monville	Adopted Date:	03/08/2012
Additional Participating Persons:	Tony Serio; FAA/FSDO; Baltimore, MD		
Publish Date:	03/08/2012		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=82237		

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