



Aviation Investigation Final Report

Location:	Immokalee, Florida	Accident Number:	ERA14CA109
Date & Time:	January 27, 2014, 10:00 Local	Registration:	N21670
Aircraft:	Cessna 172S	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

According to the flight instructor and the student pilot, they flew from their home airport to another airport where the student pilot completed four landings without the flight instructor touching the controls. After the fourth landing, the flight instructor got out of the airplane so the student pilot could complete three solo takeoffs and landings. The first two landings were uneventful; however, according to the student pilot, just before the landing flare for the third landing, the airplane was "pushed" to the left side of the runway, "possibly by a wind gust," then landed hard. The flight instructor noted that during the approach, the airplane appeared to be slower than normal, followed by a hard landing. The main landing gear touched down first, then there was a "gallop on the nose wheel," and the airplane bounced twice before all landing gear were on the ground. The flight instructor subsequently performed a partial inspection the airplane, determined there was no damage, and the two flew it back to their home airport. During a subsequent rental, at an en route stop, another pilot noted propeller damage, and further inspection revealed firewall damage. Neither the flight instructor nor the student pilot reported any preexisting mechanical anomalies or damage to the airplane. Wind, recorded about the time of the accident, was 10 degrees from the right of runway heading, at 6 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's improper landing flare, which resulted in a hard landing.

Findings

Aircraft	Landing flare - Incorrect use/operation
Personnel issues	Aircraft control - Student/instructed pilot

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
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Student pilot Information

Certificate:	Student	Age:	66
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	January 14, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	26 hours (Total, all aircraft), 26 hours (Total, this make and model), 26 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N21670
Model/Series:	172S	Aircraft Category:	Airplane
Year of Manufacture:	2004	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	172S9709
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	December 14, 2013 Annual	Certified Max Gross Wt.:	2299 lbs
Time Since Last Inspection:	5 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4171 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	IO-360-L2A
Registered Owner:	REXAIR SALES & LEASING LLC	Rated Power:	180 Horsepower
Operator:	REXAIR SALES & LEASING LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	IMM,37 ft msl	Distance from Accident Site:	
Observation Time:	09:55 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	21°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Immokalee, FL (IMM)	Type of Flight Plan Filed:	None
Destination:	Immokalee, FL (IMM)	Type of Clearance:	None
Departure Time:	09:55 Local	Type of Airspace:	

Airport Information

Airport:	Immokalee Regional IMM	Runway Surface Type:	Asphalt
Airport Elevation:	37 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	5000 ft / 150 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	26.433889,-81.40139(est)

Administrative Information

Investigator In Charge (IIC): Cox, Paul

Additional Participating Persons:

Original Publish Date: June 5, 2014

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=88743>

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