



Aviation Investigation Final Report

Location:	Scappoose, Oregon	Accident Number:	GAA16CA407
Date & Time:	August 1, 2016, 16:00 Local	Registration:	N49276
Aircraft:	Cessna 152	Aircraft Damage:	Substantial
Defining Event:	Abnormal runway contact	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot reported that during the third landing of his first solo, the airplane was a "little high" on final approach. He further reported that during the landing flare, the right wing was lifted by a crosswind and the airplane bounced nose wheel first on the runway. Subsequently, the nose wheel partially collapsed, the propeller struck the runway, and the airplane skidded to a stop on the runway.

The firewall sustained substantial damage.

The student pilot did not report any mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The automated weather observing system (AWOS) at the airport about 7 minutes before the accident recorded the wind at 020 degrees true at 11 knots, gusting to 15 knots. The AWOS at the airport about 53 minutes after the accident recorded the wind at 330 degrees true at 8 knots. The student pilot reported that the landing was on runway 33.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's failure to maintain pitch control during the landing flare in gusty crosswind conditions, which resulted in a hard landing/abnormal runway contact, a partial nose wheel collapse and substantial damage to the firewall.

Findings

Personnel issues	Aircraft control - Student/instructed pilot
Aircraft	Pitch control - Not attained/maintained
Environmental issues	Crosswind - Ability to respond/compensate
Environmental issues	Gusts - Ability to respond/compensate

Factual Information

History of Flight

Landing-flare/touchdown	Other weather encounter
Landing-flare/touchdown	Abnormal runway contact (Defining event)
Landing-landing roll	Landing gear collapse

Student pilot Information

Certificate:	Student	Age:	18,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	March 22, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 25 hours (Total, all aircraft), 25 hours (Total, this make and model), 1 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N49276
Model/Series:	152 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	1977	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	15281217
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	July 29, 2016 100 hour	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	18015.8 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C126 installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:	HILLSBORO AVIATION INC.	Rated Power:	115 Horsepower
Operator:	Hillsboro Aero Academy	Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSPB, 58 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	22:53 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 15 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Scappoose, OR (SPB)	Type of Flight Plan Filed:	Company VFR
Destination:	Scappoose, OR (SPB)	Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	SCAPPOOSE INDUSTRIAL AIRPARK SPB	Runway Surface Type:	Asphalt
Airport Elevation:	58 ft msl	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	5100 ft / 100 ft	VFR Approach/Landing:	Full stop;Go around;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:	45.777221,-122.863609(est)

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Darren K Vaughn; FAA; Portland, OR
Original Publish Date:	September 22, 2016
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.nts.gov/Docket?ProjectID=93738

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