



National Transportation Safety Board Aviation Accident Factual Report

Location:	Belle Plaine, MN	Accident Number:	GAA16CA437
Date & Time:	08/17/2016, 1400 CDT	Registration:	N631TK
Aircraft:	CESSNA 152	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

The student pilot reported that during the soft field takeoff roll the airplane veered to the right, and she corrected with left rudder. She further reported that once the main landing gear lifted off the runway, she released the back pressure on the yoke and she "started to lose control" of the airplane. The flight instructor reported that after the loss of control the nose of the airplane "dropped to the ground rapidly", and the right wing impacted the ground and the nose landing gear collapsed.

The airplane sustained substantial damage to the right wing and firewall.

The flight instructor reported no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The Federal Aviation Administration has published the Airplane Flying Handbook FAA-H-8083-3A (2004). This handbook discusses pilots actions after liftoff during short field takeoff's and states in part:

After becoming airborne, the nose should be lowered very gently with the wheels clear of the surface to allow the airplane to accelerate to VY, or VX if obstacles must be cleared. Extreme care must be exercised immediately after the airplane becomes airborne and while it accelerates, to avoid settling back onto the surface. An attempt to climb prematurely or too steeply may cause the airplane to settle back to the surface as a result of losing the benefit of ground effect. An attempt to climb out of ground effect before sufficient climb airspeed is attained may result in the airplane being unable to climb further as the ground effect area is transited, even with full power. Therefore, it is essential that the airplane remain in ground effect until at least VX is reached. This requires feel for the airplane, and a very fine control touch, in order to avoid over-controlling the elevator as required control pressures change with airplane acceleration.

Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	23, Female
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
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 FAA Medical Exam:	07/25/2016
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	11/29/2015
Flight Time:	(Estimated) 990 hours (Total, all aircraft), 295 hours (Total, this make and model), 900 hours (Pilot In Command, all aircraft), 169 hours (Last 90 days, all aircraft), 61 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Student Pilot Information

Certificate:	None	Age:	19, Female
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 24 hours (Total, all aircraft), 15 hours (Total, this make and model), 24 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N631TK
Model/Series:	152 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	1980	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	15284669
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	07/07/2016, Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	11930.2 Hours as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	C91A installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:	R & R AERO SERVICES LLC.	Rated Power:	110 hp
Operator:	Inflight Holdings LLC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KGYL, 992 ft msl	Distance from Accident Site:	14 Nautical Miles
Observation Time:	0655 UTC	Direction from Accident Site:	295°
Lowest Cloud Condition:	Clear	Visibility	4 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	18° C / 19° C
Precipitation and Obscuration:	Moderate - Mist; No Obscuration; No Precipitation		
Departure Point:	Belle Plaine, MN (7Y7)	Type of Flight Plan Filed:	None
Destination:	Belle Plaine, MN (7Y7)	Type of Clearance:	None
Departure Time:	1345 CDT	Type of Airspace:	Class G

Airport Information

Airport:	A R S SPORT STRIP (7Y7)	Runway Surface Type:	Grass/turf
Airport Elevation:	955 ft	Runway Surface Condition:	Rough; Wet
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	2546 ft / 110 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	44.657222, -93.778889 (est)

Administrative Information

Investigator In Charge (IIC):	Jackie L Vanover
Additional Participating Persons:	David Nelson; FAA; Minneapolis, MN
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=93866