



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Manhattan, KS	<b>Accident Number:</b>	GAA16CA364
<b>Date &amp; Time:</b>	07/01/2016, 1000 CST	<b>Registration:</b>	N5100V
<b>Aircraft:</b>	CESSNA 172RG	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

## Analysis

The pilot reported that he was receiving instruction in an airplane with retractable landing gear. He further reported that during landing, the airplane touched down and began sliding on the concrete runway, and he "knew something was wrong".

The flight instructor reported that he was the pilot in command of the airplane and that on final both pilots were on the controls. He further reported that he realized there was an issue when he heard metal on pavement.

The airplane impacted the runway with its landing gear retracted, causing substantial damage to the fuselage and bulkhead.

The pilot receiving instruction reported that there were no pre impact mechanical failures or malfunctions with the airframe or engine that would have precluded normal operation. There was a post-accident landing gear aural warning horn check/test conducted, with no maintenance issues found.

## Flight Events

- Landing - Miscellaneous/other
- Landing - Landing gear not configured
- Landing - Abnormal runway contact

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor and pilot receiving instruction's omission to use an appropriate checklist and extend the landing gear prior to landing, which resulted in substantial damage to the aircraft's fuselage and bulkhead.

## Findings

- Aircraft-Aircraft systems-Landing gear system-Gear extension and retract sys-Not used/operated - C
- Personnel issues-Task performance-Use of equip/info-Use of checklist-Student/instructed pilot - C
- Personnel issues-Task performance-Use of equip/info-Use of checklist-Instructor/check pilot - C
- Personnel issues-Action/decision-Action-Forgotten action/omission-Student/instructed pilot - C
- Personnel issues-Action/decision-Action-Forgotten action/omission-Instructor/check pilot - C
- Personnel issues-Psychological-Attention/monitoring-Monitoring other person-Instructor/check pilot
- Personnel issues-Task performance-Use of equip/info-Use of equip/system-Student/instructed pilot
- Personnel issues-Psychological-Attention/monitoring-Task monitoring/vigilance-Instructor/check pilot

## Student Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	35
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	(Estimated) 450 hours (Total, all aircraft), 2 hours (Total, this make and model), 450 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Flight Instructor Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	32
<b>Airplane Rating(s):</b>	Multi-engine Sea; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine
<b>Flight Time:</b>	(Estimated) 350 hours (Total, all aircraft), 20 hours (Total, this make and model), 243 hours (Pilot In Command, all aircraft), 90 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	CESSNA	<b>Registration:</b>	N5100V
<b>Model/Series:</b>	172RG NO SERIES	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	On file	<b>Engine Manufacturer:</b>	LYCOMING
<b>Air Carrier Operating Certificate:</b>	None	<b>Engine Model/Series:</b>	O-360-F1A6
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	KMHK, 1056 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	None
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	8 knots, 70°
<b>Temperature:</b>	24°C / 16°C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Manhattan, KS (MHK)	<b>Destination:</b>	Manhattan, KS (MHK)

## Airport Information

<b>Airport:</b>	MANHATTAN RGNL (MHK)	<b>Runway Surface Type:</b>	Concrete
<b>Runway Used:</b>	03	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	7000 ft / 150 ft		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None

## Administrative Information

Investigator In Charge (IIC):	Eric A Swenson	Adopted Date:	08/31/2016
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93573">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93573</a>		

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