



## National Transportation Safety Board Aviation Accident Factual Report

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<b>Location:</b>	Ottumwa, IA	<b>Accident Number:</b>	GAA16CA501
<b>Date &amp; Time:</b>	09/21/2016, 1100 CDT	<b>Registration:</b>	N3803T
<b>Aircraft:</b>	PIPER PA28R	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

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The flight instructor reported that the pilot receiving instruction was demonstrating a power-off 180 degree landing. He further reported that as the airplane entered a close-in base to final approach, the airspeed slowed and the stall warning light started to flicker. The flight instructor reported that he stated to the pilot flying, "nose down, nose down," and waited for him to correct. Subsequently, the flight instructor took the flight controls, but as he did so, the airplane entered an aerodynamic stall and touched down hard on the runway. During the landing roll, the flight instructor reported that he lost rudder authority but was able to use differential braking to maintain directional control and taxi off the runway.

The right wing sustained substantial damage.

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

## Flight Instructor Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	22, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap Only
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane Single-engine; Instrument Airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With Waivers/Limitations	<b>Last FAA Medical Exam:</b>	02/25/2016
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	04/29/2016
<b>Flight Time:</b>	(Estimated) 1215 hours (Total, all aircraft), 9 hours (Total, this make and model), 1180 hours (Pilot In Command, all aircraft), 130 hours (Last 90 days, all aircraft), 36 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	21, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap Only
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Without Waivers/Limitations	<b>Last FAA Medical Exam:</b>	08/16/2013
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	07/15/2015
<b>Flight Time:</b>	(Estimated) 190 hours (Total, all aircraft), 11 hours (Total, this make and model), 163 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N3803T
Model/Series:	PA28R 180	Aircraft Category:	Airplane
Year of Manufacture:	1967	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	28R-30117
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	05/31/2016, 100 Hour	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3927 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed, not activated	Engine Model/Series:	IO-360-B1E
Registered Owner:	ARCHANGEL SERVICES LLC.	Rated Power:	180 hp
Operator:	Indian Hills Community College	Operating Certificate(s) Held:	Pilot School (141)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KOTM, 845 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1553 UTC	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	29° C / 22° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	OTTUMWA, IA (OTM)	Type of Flight Plan Filed:	None
Destination:	OTTUMWA, IA (OTM)	Type of Clearance:	None
Departure Time:	1000 CDT	Type of Airspace:	Class E

## Airport Information

Airport:	OTTUMWA RGNL (OTM)	Runway Surface Type:	Asphalt; Concrete
Airport Elevation:	845 ft	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	5885 ft / 150 ft	VFR Approach/Landing:	Full Stop; Simulated Forced Landing

## 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
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	41.106389, -92.449722 (est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Adam M Gerhardt
<b>Additional Participating Persons:</b>	Josh Rohrer; FAA; Des Moines, IA
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=94060">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=94060</a>