



# Aviation Investigation Final Report

<b>Location:</b>	Vero Beach, Florida	<b>Accident Number:</b>	GAA18CA204
<b>Date &amp; Time:</b>	March 2, 2018, 12:30 Local	<b>Registration:</b>	N158ND
<b>Aircraft:</b>	Piper PA28	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The solo student pilot reported that, during approach, he was above the glideslope after adding full flaps, so he lowered the nose to lose altitude. He added that he "brought a little more speed than intended" into ground effect and the airplane yawed to the left. He overcorrected to the right. The airplane touched down to the right of the runway centerline with the nose pointed 45° to the left. The student attempted to maintain directional control, but the airplane exited the runway to the right and the right wing struck a runway sign. The student pilot taxied back onto the runway and to the parking ramp without further incident.

The airplane sustained substantial damage to the right wing.

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

The automated weather observation station located on the airport reported that, about 37 minutes before the accident, the wind was from 360° at 6 knots. The same automated station reported that, about 23 minutes after the accident, the wind was from 030° at 11 knots, gusting to 17 knots. The airplane landed on runway 04.

## 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 a stabilized approach, which resulted in overcorrection with the rudder during the landing, loss of control, and a runway excursion.

## Findings

<b>Aircraft</b>	Descent/approach/glide path - Not attained/maintained
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Student/instructed pilot
<b>Environmental issues</b>	Sign/marker - Effect on equipment
<b>Environmental issues</b>	Sign/marker - Contributed to outcome

## Factual Information

### History of Flight

<b>Landing</b>	Loss of control in flight (Defining event)
<b>Landing</b>	Attempted remediation/recovery
<b>Landing-landing roll</b>	Loss of control on ground
<b>Landing-landing roll</b>	Runway excursion
<b>Landing-landing roll</b>	Collision with terr/obj (non-CFIT)

### Student pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	35,Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	December 7, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 30 hours (Total, all aircraft), 30 hours (Total, this make and model), 7 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N158ND
<b>Model/Series:</b>	PA28 161	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1998	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	2842030
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	February 27, 2018 AAIP	<b>Certified Max Gross Wt.:</b>	2447 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	11442 Hrs at time of accident	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	O-320-D3G
<b>Registered Owner:</b>		<b>Rated Power:</b>	160 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	Pilot school (141)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KVRB, 28 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	16:53 Local	<b>Direction from Accident Site:</b>	140°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.07 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 15°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	OKEECHOBEE, FL (OBE )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Vero Beach, FL (VRB )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:05 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	VERO BEACH RGNL VRB	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	23 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	04	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4974 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop;Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	27.653888,-80.422775(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Benhoff, Kathryn
<b>Additional Participating Persons:</b>	Billy J Meadows; FAA; Orlando, FL
<b>Original Publish Date:</b>	July 5, 2018
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=97003">https://data.nts.gov/Docket?ProjectID=97003</a>

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