



# Aviation Investigation Final Report

<b>Location:</b>	Arcadia, Florida	<b>Accident Number:</b>	GAA17CA040
<b>Date &amp; Time:</b>	October 23, 2016, 15:00 Local	<b>Registration:</b>	N7329K
<b>Aircraft:</b>	Piper PA 20S	<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 - Ferry		

## Analysis

The pilot reported that he ferried the straight float-equipped airplane to a grass airstrip for an annual inspection. During landing on the grass airstrip in crosswind conditions, the pilot reported that upon touchdown he applied back pressure to the controls and added power, but the airplane lifted and came back down quickly. The crosswind had drifted the airplane to the left and as the airplane began to slow on the runway the pilot felt the left float buckle. Subsequently, the left wing and nose impacted the ground and the airplane nosed over, coming to rest inverted.

The airplane sustained substantial damage to both wings, the fuselage, and the rudder.

The pilot reported that there were no pre impact mechanical failures or malfunctions with the airframe or engine that would have precluded normal operation.

The pilot reported the wind as 060 degrees true at 10 nautical miles per hour, and not gusting. The pilot landed on runway 31.

The pilot reported that the grass had just been cut, and that it would have been better if there had been dew on the grass. He further reported that the crosswind drifted the airplane to the left causing the left float to collapse. He wrote that he should have returned home and come back the following day when there was dew on the grass and no headwind.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's improper pitch and power control during landing in a straight float-equipped airplane on grass in crosswind conditions, which resulted in a loss of directional control.

### Findings

<b>Aircraft</b>	Pitch control - Not attained/maintained
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Environmental issues</b>	(general) - Effect on operation
<b>Environmental issues</b>	(general) - Effect on operation

## Factual Information

### History of Flight

<b>Landing</b>	Hard landing
<b>Landing</b>	Loss of control in flight (Defining event)
<b>Landing</b>	Abnormal runway contact
<b>Landing</b>	Dragged wing/rotor/float/other
<b>Landing</b>	Nose over/nose down

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	48, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<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>	August 7, 2015
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	May 30, 2015
<b>Flight Time:</b>	(Estimated) 675 hours (Total, all aircraft), 300 hours (Total, this make and model), 675 hours (Pilot In Command, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N7329K
<b>Model/Series:</b>	PA 20S UNDESIGNAT	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1950	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	20-236
<b>Landing Gear Type:</b>	Float	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	September 30, 2015 Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2500 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PGD,30 ft msl	<b>Distance from Accident Site:</b>	18 Nautical Miles
<b>Observation Time:</b>	18:53 Local	<b>Direction from Accident Site:</b>	204°
<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>	11 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	30°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.14 inches Hg	<b>Temperature/Dew Point:</b>	27°C / 9°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Manatee River, FL	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Arcadia, FL (X06 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	ARCADIA MUNI X06	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	63 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	31	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2780 ft / 140 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## 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>	27.195554,-81.840278(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Swenson, Eric
<b>Additional Participating Persons:</b>	Robert R Blake; FAA; Tampa, FL
<b>Original Publish Date:</b>	December 15, 2016
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<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=94273">https://data.nts.gov/Docket?ProjectID=94273</a>

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