



# Aviation Investigation Final Report

<b>Location:</b>	West Mifflin, Pennsylvania	<b>Accident Number:</b>	GAA15CA148
<b>Date &amp; Time:</b>	June 27, 2015, 17:21 Local	<b>Registration:</b>	N93TK
<b>Aircraft:</b>	Mooney M20R	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that during the initial touch down the airplane bounced, the pilot elected to abort the landing, and the airplane drifted to the left of the runway when power was applied. The pilot stated that the airplane did not have sufficient airspeed when she retracted the first notch of flaps, the airplane descended and the right wing impacted the ground, resulting in substantial damage to the right wing.

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

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain pitch control during landing, which resulted in a bounce and loss of control during landing, followed by a runway excursion, and collision with terrain during an attempt to abort the landing.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Pitch control - Not attained/maintained

## Factual Information

### History of Flight

<b>Landing</b>	Loss of control in flight (Defining event)
<b>Landing</b>	Runway excursion
<b>Landing</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	47
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<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 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	April 23, 2015
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	August 10, 2013
<b>Flight Time:</b>	(Estimated) 599 hours (Total, all aircraft), 498 hours (Total, this make and model), 386 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Pilot-rated passenger Information

<b>Certificate:</b>	Private	<b>Age:</b>	49
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<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 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	April 10, 2015
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	November 23, 2014
<b>Flight Time:</b>	(Estimated) 1744 hours (Total, all aircraft), 1235 hours (Total, this make and model), 1567 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	9
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	9
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Mooney	<b>Registration:</b>	N93TK
<b>Model/Series:</b>	M20R NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2005	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	29-0360
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	May 21, 2015 Annual	<b>Certified Max Gross Wt.:</b>	3368 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1491.8 Hrs at time of accident	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	C91A installed, not activated	<b>Engine Model/Series:</b>	IO-550G(6)B
<b>Registered Owner:</b>	PANTHER WINGS LLC	<b>Rated Power:</b>	280 Horsepower
<b>Operator:</b>	Elizabeth C Tyler-Kabara	<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>	KAGC,1273 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	21:53 Local	<b>Direction from Accident Site:</b>	59°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 3100 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	170°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	29.64 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	MANTEO, NC (MQI )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	West Mifflin, PA (AGC )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	15:00 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	ALLEGHENY COUNTY AGC	<b>Runway Surface Type:</b>	Concrete
<b>Airport Elevation:</b>	1251 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	28	<b>IFR Approach:</b>	ILS;Practice
<b>Runway Length/Width:</b>	6501 ft / 150 ft	<b>VFR Approach/Landing:</b>	Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	40.353889,-79.924446(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Vanover, Jackie
<b>Additional Participating Persons:</b>	Laura Delewski; FAA; Pittsburgh, PA
<b>Original Publish Date:</b>	August 11, 2015
<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=91465">https://data.nts.gov/Docket?ProjectID=91465</a>

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