



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Mount Holly, New Jersey	<b>Accident Number:</b>	GAA18CA472
<b>Date &amp; Time:</b>	August 4, 2018, 16:00 Local	<b>Registration:</b>	N1160D
<b>Aircraft:</b>	Cessna 140	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Nose over/nose down	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot in the tailwheel-equipped airplane reported that, during landing, the airplane ballooned and then touched down on the left side of the runway centerline and exited the left side of the runway. The pilot braked hard in the grass safety area to avoid colliding with an airplane on a nearby taxiway, and the airplane subsequently nosed over.

The airplane sustained substantial damage to the vertical stabilizer and the rudder.

The pilot reported that the accident was a result of pilot error.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane 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 improper landing flare, which resulted in the airplane ballooning upon landing, and his subsequent loss of directional control and excessive brake application.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Aircraft</b>	Landing gear brakes system - Incorrect use/operation
<b>Aircraft</b>	Landing flare - Not attained/maintained

## Factual Information

### History of Flight

Landing-landing roll	Abnormal runway contact
Landing-landing roll	Runway excursion
Landing-landing roll	Nose over/nose down (Defining event)

### Pilot Information

Certificate:	Private	Age:	52,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	December 18, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 21, 2018
Flight Time:	(Estimated) 483 hours (Total, all aircraft), 28 hours (Total, this make and model), 369 hours (Pilot In Command, all aircraft), 43 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N1160D
<b>Model/Series:</b>	140 A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1951	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	15723
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	June 20, 2018 Annual	<b>Certified Max Gross Wt.:</b>	1022 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1161.3 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	C91A installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	C90-14-F
<b>Registered Owner:</b>		<b>Rated Power:</b>	90 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>	KVAY, 53 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	20:54 Local	<b>Direction from Accident Site:</b>	25°
<b>Lowest Cloud Condition:</b>	Few / 4800 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	260°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.05 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 21°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Mount Holly, NJ (VAY )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Mount Holly, NJ (VAY )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	South Jersey Rgnl VAY	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	52 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	26	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3881 ft / 50 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<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 Minor	<b>Latitude, Longitude:</b>	39.942779,-74.845832(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	Michael Bauer; FAA; Philadelphia, PA
<b>Original Publish Date:</b>	June 10, 2019
<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=98007">https://data.nts.gov/Docket?ProjectID=98007</a>

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