



# **Aviation Investigation Final Report**

**Location:** Concord, New Hampshire **Accident Number:** GAA17CA005

Date & Time: October 3, 2016, 11:00 Local Registration: N305MR

Aircraft: CESSNA ECTOR 305 Aircraft Damage: Substantial

**Defining Event:** Loss of control on ground **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot of a tailwheel-equipped airplane reported that shortly after touchdown, he "lost directional control" to the right, attempted to correct with left rudder and brake inputs, but was unsuccessful. The airplane continued to veer off the runway to the right, ground looped, and the left wing impacted the ground.

The airplane sustained substantial damage to the left wing.

The pilot reported no preaccident mechanical malfunctions or failures 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 failure to maintain directional control during the landing roll, which resulted in a ground loop.

### Findings

Aircraft	Directional control - Not attained/maintained
Aircraft	Directional control - Not attained/maintained

Personnel issues Aircraft control - Pilot

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### **Factual Information**

### History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion
Landing-landing roll	Landing gear collapse
Landing-landing roll	Collision with terr/obj (non-CFIT)

### **Pilot Information**

Certificate:	Airline transport; Flight instructor	Age:	64,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	January 8, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 29, 2016
Flight Time:	(Estimated) 4695 hours (Total, all aircraft), 5 hours (Total, this make and model), 4450 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft), 8.5 hours (Last 30 days, all aircraft), 0.8 hours (Last 24 hours, all aircraft)		

### **Passenger Information**

Certificate:		Age:	Female
Airplane Rating(s):		Seat Occupied:	Center
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

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### **Aircraft and Owner/Operator Information**

Aircraft Make:	CESSNA ECTOR	Registration:	N305MR
Model/Series:	305 A	Aircraft Category:	Airplane
Year of Manufacture:	1965	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2011
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	March 11, 2016 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1756 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	0-470-15
Registered Owner:	On file	Rated Power:	213 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KCON,346 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	14:51 Local	Direction from Accident Site:	162°
<b>Lowest Cloud Condition:</b>	Few / 600 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 9500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	14°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LACONIA, NH (LCI)	Type of Flight Plan Filed:	None
Destination:	Concord, NH (CON)	Type of Clearance:	VFR
Departure Time:	10:25 Local	Type of Airspace:	Class E

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## **Airport Information**

Airport:	CONCORD MUNI CON	Runway Surface Type:	Asphalt
Airport Elevation:	341 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	6005 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

### Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	43.201667,-71.50389(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Vanover, Jackie
Additional Participating Persons:	Sean Adams; FAA; Portland, ME
Original Publish Date:	February 6, 2017
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=94147

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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