



# Aviation Investigation Final Report

<b>Location:</b>	Newton, Iowa	<b>Accident Number:</b>	GAA16CA093
<b>Date &amp; Time:</b>	January 2, 2016, 10:00 Local	<b>Registration:</b>	N947SP
<b>Aircraft:</b>	Cessna 172	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Runway excursion	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

According to the pilot, his intent was to perform a touch and go landing on a runway with patches of snow extending from the approach end to the departure end. The pilot reported that the touchdown and landing roll were uneventful. He reported that as he aborted the landing and configured the airplane for takeoff, he retracted the flaps, advanced the throttle and applied right rudder. He recalled that when he advanced the throttle, the airplane immediately made a sharp left turn, exited the runway to the left, and impacted the residual snow that was previously cleared from the runway. The airplane nosed over and the pilot exited the runway under his own power. The airplane sustained substantial damage to the vertical stabilizer and both wings.

The pilot reported that there were no mechanical failures or anomalies prior to or during the flight that would have prevented normal flight 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 airplane control during the takeoff, resulting in a runway excursion, and airplane nose over.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Environmental issues</b>	Snowy/icy terrain - Decision related to condition
<b>Environmental issues</b>	Snow/ice - Effect on equipment
<b>Environmental issues</b>	Snow/slush/ice covered surface - Decision related to condition
<b>Personnel issues</b>	Decision making/judgment - Pilot

## Factual Information

### History of Flight

Landing-aborted after touchdown	Loss of control on ground
Landing-aborted after touchdown	Runway excursion (Defining event)
Landing-aborted after touchdown	Collision during takeoff/land
Landing-aborted after touchdown	Collision with terr/obj (non-CFIT)
Landing-aborted after touchdown	Nose over/nose down

### Pilot Information

Certificate:	Private	Age:	52,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	December 11, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 9, 2015
Flight Time:	(Estimated) 121 hours (Total, all aircraft), 121 hours (Total, this make and model), 14 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N947SP
<b>Model/Series:</b>	172 S	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1999	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	172S8142
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	November 14, 2015 100 hour	<b>Certified Max Gross Wt.:</b>	2299 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	8347 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	C91 installed, not activated	<b>Engine Model/Series:</b>	IO-360
<b>Registered Owner:</b>	CENTRAL IOWA AVIATION LLC	<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	CENTRAL IOWA AVIATION LLC	<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>	TNU, 952 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	15:55 Local	<b>Direction from Accident Site:</b>	0°
<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 / None	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	250°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.18 inches Hg	<b>Temperature/Dew Point:</b>	-9°C / -10°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	ANKENY, IA (IKV )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Newton, IA (TNU )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	09:30 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	NEWTON MUNI-EARL JOHNSON FIELD TNU	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	952 ft msl	<b>Runway Surface Condition:</b>	Ice;Snow
<b>Runway Used:</b>	32	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5599 ft / 100 ft	<b>VFR Approach/Landing:</b>	None

## 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>	41.674446,-93.021667(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	Patrick T Blaskovich; Federal Aviation Administration; Ankeny, IA Terence T Carr; Federal Aviation Administration; Ankeny, IA
<b>Original Publish Date:</b>	April 5, 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=92525">https://data.nts.gov/Docket?ProjectID=92525</a>

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