



# Aviation Investigation Final Report

<b>Location:</b>	Danville, Illinois	<b>Accident Number:</b>	CEN11LA178
<b>Date &amp; Time:</b>	February 7, 2011, 10:30 Local	<b>Registration:</b>	N6XZ
<b>Aircraft:</b>	Beech A36	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

The pilot reported that while he was in the downwind leg of the traffic pattern he checked for runway contamination and the runway was clear and dry. He stated that his landing approach and touchdown on the runway centerline were uneventful. Approximately 500 feet into the landing roll, he applied right brake pressure, and the airplane immediately entered a right swerve. He stated that he was unable to regain directional control with the full application of left rudder and brake inputs. The airplane continued in the right swerve, departing off the right side of the runway. The left main landing gear collapsed during the runway excursion, damaging the left wing closeout rib and aft spar. The pilot's statement that airplane continued to track the runway centerline for 500 feet after touchdown, before his first application of brake pressure, suggests that the disk-brake components and rotor were clear of any contamination such as ice and/or snow during the landing roll. Further, if there had been any contamination, the rotational energy at touchdown would have broken loose any ice or snow. A postaccident examination of the airplane's right wheel and disk-brake components did not reveal any preimpact anomalies or failures that would have prevented 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.

## Findings

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

# 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

On February 7, 2011, at 1030 central standard time, a Beech model A36 airplane, N6XZ, was substantially damaged while landing at Vermilion Regional Airport (KDNV), near Danville, Illinois. The pilot and two passengers were not injured. The airplane was registered to and operated by the Kahler Automation Corporation, under the provisions of 14 Code of Federal Regulations Part 91. Day visual meteorological conditions prevailed for the flight, which was operated on an instrument flight plan. The flight departed Fairmont Municipal Airport (KFRM), Fairmont, Minnesota, at approximately 0800 for the cross-country flight.

The pilot reported that during the downwind leg for runway 34 he did not notice any ice or snow contamination on the runway. He stated that his landing approach and touchdown on the runway centerline were uneventful. Approximately 500 feet into the landing rollout, he applied right brake pressure and the airplane immediately entered a right swerve. He stated that he was unable to regain directional control with the full application of left rudder and brake inputs. The airplane continued in the right swerve, departing off the right side of the runway. The left main landing gear collapsed during the runway excursion damaging the left wing closeout rib and aft spar. A postaccident examination of the airplane's right wheel and disk-brake components did not reveal any preimpact anomalies or failures that would have prevented normal operation.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	60,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<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>	February 16, 2010
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	November 19, 2010
<b>Flight Time:</b>	1050 hours (Total, all aircraft), 44 hours (Total, this make and model), 765 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N6XZ
<b>Model/Series:</b>	A36	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Utility	<b>Serial Number:</b>	E-2047
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	May 13, 2010 Annual	<b>Certified Max Gross Wt.:</b>	3600 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2055 Hrs at time of accident	<b>Engine Manufacturer:</b>	Teledyne Continental Motors
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-550-BSF
<b>Registered Owner:</b>	Kahler Automation Corporation	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>	Kahler Automation Corporation	<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>	KDNV, 697 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	10:25 Local	<b>Direction from Accident Site:</b>	
<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>	9 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	330°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.95 inches Hg	<b>Temperature/Dew Point:</b>	-2°C / -5°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Fairmont, MN (KFRM)	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Danville, IL (KDNV)	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	08:00 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	Vermilion Regional Airport KDNV	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	697 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	34	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3999 ft / 100 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 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>	3 None	<b>Latitude, Longitude:</b>	40.199722,-87.595558(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Fox, Andrew
<b>Additional Participating Persons:</b>	Brian L Lands; Federal Aviation Administration - Springfield FSDO; Springfield, IL
<b>Original Publish Date:</b>	December 19, 2011
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=78307">https://data.nts.gov/Docket?ProjectID=78307</a>

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