



# Aviation Investigation Final Report

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<b>Location:</b>	Oshkosh, Wisconsin	<b>Accident Number:</b>	GAA17CA451
<b>Date &amp; Time:</b>	July 28, 2017, 10:30 Local	<b>Registration:</b>	N410BP
<b>Aircraft:</b>	MARK GOLDBERG BEARHAWK PATROL	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot of the tailwheel-equipped airplane reported that, during the landing roll in crosswind conditions, when "transitioning from rudder to braking, the tail started rapidly swinging to the left due to wind." He added that "rudder correction was ineffective," and he applied wheel brakes, but the airplane continued in the ground loop clockwise, the left main landing gear collapsed, and the left wing impacted the runway.

The left wing sustained substantial damage.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

An automated weather observation station at the accident airport reported, about the time of the accident, wind from 040° at 8 knots. The pilot reported that, while on short final, the air traffic tower controller announced, "wind 050 at 12." The pilot added that the landing was on runway 36.

## 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 in crosswind conditions, which resulted in a ground loop.

## Findings

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<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Environmental issues</b>	Crosswind - Effect on operation

## Factual Information

### History of Flight

<b>Landing-landing roll</b>	Other weather encounter
<b>Landing-landing roll</b>	Loss of control on ground (Defining event)
<b>Landing-landing roll</b>	Landing gear collapse
<b>Landing-landing roll</b>	Abnormal runway contact

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	61, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-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>	BasicMed With waivers/limitations	<b>Last FAA Medical Exam:</b>	July 19, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 742 hours (Total, all aircraft), 43 hours (Total, this make and model), 692 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	MARK GOLDBERG	<b>Registration:</b>	N410BP
<b>Model/Series:</b>	BEARHAWK PATROL NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2012	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	P01-P001/P002-P
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	O-360
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	
<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>	KOSH,808 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	15:53 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>	8 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	40°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.07 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 14°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Oshkosh, WI (OSH)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Oshkosh, WI (OSH)	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	10:05 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	WITTMAN RGNL OSH	<b>Runway Surface Type:</b>	Concrete
<b>Airport Elevation:</b>	808 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	36	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	8002 ft / 150 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	43.984443,-88.556945(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gerhardt, Adam
<b>Additional Participating Persons:</b>	Peter Corrao; FAA/ FSDO; Milwaukee, WI
<b>Original Publish Date:</b>	November 14, 2017
<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=95706">https://data.nts.gov/Docket?ProjectID=95706</a>

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