



# Aviation Investigation Final Report

<b>Location:</b>	Sac City, Iowa	<b>Accident Number:</b>	CEN11CA065
<b>Date &amp; Time:</b>	November 3, 2010, 17:00 Local	<b>Registration:</b>	N475TW
<b>Aircraft:</b>	WELCH THOMAS RV9	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

According to the pilot, the weather information he obtained en route indicated that the wind at his destination airport was from 300 degrees at 25 knots. The airplane encountered turbulence and wind gusts while on final approach and, despite the pilot’s control inputs, the airplane impacted terrain off the right side of the runway. The wind reported 25 miles from the accident site, about 15 minutes after the accident, was from 310 degrees at 23 knots gusting to 33 knots. The wings, firewall, and fuselage sustained substantial damage.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's loss of directional control while landing with a gusting wind.

## Findings

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

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Loss of control in flight (Defining event)
<b>Landing-flare/touchdown</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	35, 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>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	June 30, 2008
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	June 5, 2010
<b>Flight Time:</b>	305 hours (Total, all aircraft), 90 hours (Total, this make and model), 240 hours (Pilot In Command, all aircraft), 70 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	WELCH THOMAS	<b>Registration:</b>	N475TW
<b>Model/Series:</b>	RV9	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	90475
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	April 7, 2010 Condition	<b>Certified Max Gross Wt.:</b>	1750 lbs
<b>Time Since Last Inspection:</b>	85 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	446 Hrs	<b>Engine Manufacturer:</b>	NSI
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	EJ25
<b>Registered Owner:</b>	Micheal L. Harmon, Jr.	<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	Micheal L. Harmon, Jr.	<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>	CIN,1204 ft msl	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	22:15 Local	<b>Direction from Accident Site:</b>	165°
<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>	23 knots / 33 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.09 inches Hg	<b>Temperature/Dew Point:</b>	15°C / -13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Effingham, IL (1H2)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Sac City, IA (SKI)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Sac City Municipal SKI	<b>Runway Surface Type:</b>	Concrete
<b>Airport Elevation:</b>	1250 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	32	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2350 ft / 60 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## 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>	42.379165,-94.979721(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Sullivan, Pamela
<b>Additional Participating Persons:</b>	Tom Clifton; FAA-DSM-FSDO; Des Moines, IA
<b>Original Publish Date:</b>	April 12, 2011
<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=77773">https://data.nts.gov/Docket?ProjectID=77773</a>

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