



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Wendover, UT	<b>Accident Number:</b>	WPR11FA242
<b>Date &amp; Time:</b>	06/01/2011, 1433 MDT	<b>Registration:</b>	N475ER
<b>Aircraft:</b>	CESSNA 172R	<b>Injuries:</b>	4 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Business		

## Analysis

About 2 hours after takeoff the pilot contacted air traffic control (ATC) services requesting that the controller identify his airplane on radar and provide him with location information. The controller provided the location information and vectors to the requested airport. A review of the ATC communications indicated that the pilot was unsure of his location and was low on fuel. At this point in the flight, the airplane's center of gravity (cg) was calculated to be 2.3 inches aft of the aft cg limit. Generally, as the cg moves aft beyond the aft limit there is an increasing likelihood that the airplane will enter a realm of decreasing pitch stability and have tail-heavy flight characteristics. The pilot attempted to land on a runway with an 80-degree crosswind that was 24 knots gusting to 28 knots. The airplane flew almost sideways down the runway and touched down on the runway several times before climbing back into the air. Surveillance video captured images of the airplane climbing above the runway; between 300 and 400 feet above ground level (agl) it made a right-hand turn, then plummeted vertically and impacted the ground. The sudden change from a 24-knot left crosswind to a 24-knot tailwind during the pilot's execution of the right-hand turn towards the downwind leg of the landing pattern, combined with some pitch sensitivity due to the cg location, most likely induced an aerodynamic stall and subsequent loss of lift that was not anticipated nor compensated for by the pilot. A postaccident examination of the airplane revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation. The pilot did not receive a weather brief from flight services, nor had he logged in to the Federal Aviation Administration's on-line flight planning system.

## Flight Events

Prior to flight - Aircraft loading event  
Prior to flight - Preflight or dispatch event  
Approach-VFR go-around - Loss of control in flight  
Uncontrolled descent - Collision with terr/obj (non-CFIT)

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot did not maintain adequate airspeed during the downwind turn resulting in an aerodynamic stall, in-flight loss of control, and spin. Contributing to the accident was the pilot's inadequate preflight planning and exceedance of the approved weight and balance envelope.

## Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Altitude-Not attained/maintained - C  
Aircraft-Aircraft handling/service-Loading-(general)-Incorrect use/operation - C  
Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C

Personnel issues-Task performance-Planning/preparation-Weight/balance calculations-Pilot - C  
Environmental issues-Conditions/weather/phenomena-Wind-Crosswind-Ability to  
respond/compensate - F

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	57
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	186 hours (Total, all aircraft), 0 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	CESSNA	<b>Registration:</b>	N475ER
<b>Model/Series:</b>	172R	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	C/O G&B INVESTMENT MANAGEMENT INC	<b>Engine Manufacturer:</b>	LYCOMING
<b>Air Carrier Operating Certificate:</b>	None	<b>Engine Model/Series:</b>	IO360 SER
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Business		

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	KENV, 4237 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	None
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	24 knots/ 28 knots, 200°
<b>Temperature:</b>	26°C / -7°C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	St George, UT (KSGU)	<b>Destination:</b>	Provo, UT (KPVU)

## Airport Information

<b>Airport:</b>	Wendover (KENV)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	26	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	8000 ft / 150 ft		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 Fatal	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None

## Administrative Information

Investigator In Charge (IIC): Van McKenny

Adopted Date: 08/29/2012

Investigation Docket: <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=79276>

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