



# Aviation Investigation Final Report

<b>Location:</b>	Borger, Texas	<b>Accident Number:</b>	CEN18LA172
<b>Date &amp; Time:</b>	May 11, 2018, 08:27 Local	<b>Registration:</b>	N833DW
<b>Aircraft:</b>	WITTMAN D R/WITTMAN D M RV 6	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The private pilot stated that, during approach to the airport, the weather observation system reported variable winds of 4 to 6 knots, which was less than forecast. While on short final approach for landing to runway 21, the pilot experienced "strong updrafts from unusual landforms," and when the airplane landed about halfway down the runway, he experienced "strong gusts causing swerving." The airplane was departing the side of the runway when the pilot chose to abort the landing by applying full engine power. The airplane was unable to outclimb the rising terrain off the side of the runway and subsequently impacted the ground and a fence.

Postaccident examination of the airplane revealed no anomalies that would have precluded normal operation. A review of recorded weather information showed winds consistently from 220° at 23 to 32 knots, which would have resulted in a crosswind component of between 2 and 6 knots. The strong updrafts the pilot experienced would have been consistent with mechanical turbulence, which could have been confirmed by wind indications from the airport windsock(s).

## 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 landing and during the subsequent aborted landing attempt in crosswind conditions.

## Findings

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

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Landing area overshoot
<b>Landing-landing roll</b>	Loss of control on ground (Defining event)
<b>Landing-aborted after touchdown</b>	Attempted remediation/recovery
<b>Initial climb</b>	Loss of control in flight
<b>Uncontrolled descent</b>	Collision with terr/obj (non-CFIT)

On May 11, 2018, at 0827 central daylight time (CDT), an experimental amateur-built Whittman RV6 airplane, N833DW, impacted terrain during an aborted landing on runway 21 at Hutchinson County Airport (BGD), Borger, Texas. The airplane was destroyed by impact forces. The private pilot sustained serious injuries. The airplane was registered to and operated by the pilot under the provisions of Title 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed and no flight plan was filed for the cross country flight. The flight departed from H A Clark Memorial Field Airport, Williams, Arizona, at 0830 mountain standard time (MST) and was destined to BGD.

The pilot stated the BGD automated surface observing system (ASOS) was reporting a variable wind of 4-6 knots, which was less than forecast. During a visual approach to runway 21 (3,897 feet by 100 feet, dry asphalt), the pilot stated that he flew an upwind pattern entry and on short final, experienced "strong updrafts from unusual landforms". The pilot landed the tailwheel equipped airplane on runway 21, near the intersection of runway 17/35 (about 1,650 feet down runway 21), and "experienced strong wind gusts causing swerving". The pilot said that as "conditions deteriorated," he decided to abort the landing and applied full engine power while the airplane was departing the runway at about a 20° angle toward the right. The airplane began to climb over rising terrain off the side of the runway. The landing gear dragged through heavy brush/weeds, which reduced the airplane's acceleration. The pilot attempted to fly the airplane under approaching powerlines due to a lack of airspeed needed for a climb. The airplane then impacted the ground and a chain link fence.

Airport Facility Directory information for BGD showed the installation of three windsocks at the airport. The windsocks were located between the approach end of runways 17 and 35 and between runways 3 and 35.

BGD ASOS recorded the following wind information:

At 0551 CDT: wind - 220° at 17 knots, gust - 28 knots

At 0651 CDT: wind - 220° at 21 knots, gust - 32 knots

At 0751 CDT: wind - 220° at 17 knots, gust – 26 knots

At 0851 CDT: wind - 220° at 14 knots, gust – 23 knots

The calculated crosswind component on runway 21 with a wind from 220° at 14 knots was 2 knots and winds from 220° at 32 knots was 6 knots.

The airplane did not have and was not required to have a published maximum demonstrated crosswind velocity capability due to its classification as an experimental airplane. A flight instructor, who provided flight instruction in RV-6 airplanes, stated that a comfortable crosswind velocity for a pilot with average skill would be about 15 knots, and a skilled pilot could land the airplane with a 20-25 knot crosswind. He said the RV6 was capable of landing in 20-25 knot crosswinds.

According to a Federal Aviation Administrator (FAA) inspector from the Lubbock Flight Standards District Office, there were no witnesses to the accident. The UNICOM operator at the time did not realize the airplane was landing because he did not hear the pilot make radio calls on UNICOM. The operator first learned of the accident through 911, which was looking for the airplane.

Post-accident examination of the airplane by the FAA inspector revealed no mechanical anomalies that would have precluded normal airplane operation. The inspector stated that the wing flaps were in the fully extended position of 40 °.

The Airplane Flying Handbook (FAA-H-8083-3B), Chapter 8, Approaches and Landings, stated in part:

"...a review of accident statistics indicates that over 45 percent of all general aviation accidents occur during the approach and landing phases of a flight. A closer look shows that the cause of over 90 percent of those cases was pilot related and loss of control was also a major contributing factor in 33 percent of the cases."

Chapter 8, Approaches and Landings stated that stabilized descent angle is controlled throughout the approach so that the airplane lands in the center of the first third of the runway and if a landing cannot be made on the first third of the runway, or the airplane drifts sideways, execute a go-around.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	63, 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>	3-point
<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>	BasicMed	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 22, 2018
<b>Flight Time:</b>	277 hours (Total, all aircraft), 180 hours (Total, this make and model), 14 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	WITTMAN D R/WITTMAN D M	<b>Registration:</b>	N833DW
<b>Model/Series:</b>	RV 6	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2003	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	23207
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	November 1, 2017 Condition	<b>Certified Max Gross Wt.:</b>	1800 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	405.7 Hrs at time of accident	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-360-A1A
<b>Registered Owner:</b>		<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>		<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>	BGD,3055 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	08:51 Local	<b>Direction from Accident Site:</b>	270°
<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>	14 knots / 23 knots	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	220°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	29.75 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 10°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Williams, AZ (CMR )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Borger, TX (BGD )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	08:30 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	Hutchinson County Airport BGD	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	3055 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	21	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3897 ft / 100 ft	<b>VFR Approach/Landing:</b>	Go around;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Destroyed
<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 Serious	<b>Latitude, Longitude:</b>	35.700832,-101.393608(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gallo, Mitchell
<b>Additional Participating Persons:</b>	Albert Hillard; Federal Aviation Administration; Lubbock FSDO; Lubbock, TX
<b>Original Publish Date:</b>	March 18, 2019
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=97250">https://data.nts.gov/Docket?ProjectID=97250</a>

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).