



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Lake Wales, FL	<b>Accident Number:</b>	ATL01LA050
<b>Date &amp; Time:</b>	05/02/2001, 1030 EDT	<b>Registration:</b>	N1491S
<b>Aircraft:</b>	Cessna 182P	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 Minor
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The airplane was on final approach to land when the pilot experienced a strong crosswind. Upon landing the airplane bounced on the runway, the nose of the airplane impacted the ground and the airplane flipped inverted.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper use of flight controls during a bounced landing, and subsequent collision with the ground. A factor of the collision is the rough and uneven terrain.

## Findings

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Occurrence #1: HARD LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

1. (C) TERRAIN CONDITION - ROUGH/UNEVEN
2. (F) FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND

## Factual Information

On May 2, 2001, at 1030 eastern daylight time, a Cessna C182P, N1491S, flipped over during a crosswind landing on the grass strip at Chalet Suzanne Air Strip, Lake Wales, Florida. The personal flight was conducted by the pilot under provisions of Title 14 CFR Part 91 with an instrument flight plan filed. Visual weather conditions prevailed at the time of the accident. The airplane was substantially damaged. The airline transport pilot and his three passengers were not injured. The flight departed Ocala Regional Airport, in Ocala, Florida, at 1000.

According to the pilot, during a crosswind landing on runway 36 at Chalet Suzanne Air Strip, "while making a normal approach, right after the nose lowered to the ground, the nose either hit a rock or hole. The nose pitched up and down repeatedly. The nose of the plane dug into the turf and the airplane flipped on its back". The airplane came to rest inverted. The pilot stated that the runway was rough and uneven terrain. The pilot and passengers then exited the airplane.

The pilot did not report a mechanical problem with the airplane. Examination of the airplane failed to disclose any mechanical malfunction or component failure. A review of recorded weather data disclosed that, weather conditions at the time of the accident showed winds 090 at 14 knots. According to The Pilot Operating Handbook, the maximum demonstrated crosswind is 15 knots.

## Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	66, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<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 1 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	06/21/2000
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	11/10/1999
<b>Flight Time:</b>	16500 hours (Total, all aircraft), 100 hours (Total, this make and model), 10000 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1491S
Model/Series:	182P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	18265038
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	01/06/2001, Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	45 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2851 Hours as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-470-S
Registered Owner:	Robert W. Kell	Rated Power:	230 hp
Operator:	Robert W. Kell	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LAL, 142 ft msl	Distance from Accident Site:	
Observation Time:	1030 EDT	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 Miles
Lowest Ceiling:	Broken / 2500 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	25°C / 17°C
Precipitation and Obscuration:			
Departure Point:	Ocala, FL (OCF)	Type of Flight Plan Filed:	None
Destination:	Chalet Suzane, FL (X25)	Type of Clearance:	None
Departure Time:	1000 EDT	Type of Airspace:	Class G

## Airport Information

Airport:	Lake Wales Chalet Suzane (X25)	Runway Surface Type:	Grass/turf
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	2800 ft / 60 ft	VFR Approach/Landing:	Full Stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 Minor	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Phillip Powell	<b>Report Date:</b>	08/21/2001
<b>Additional Participating Persons:</b>	John M Murphy; Orlando FSDO		
<b>Publish Date:</b>			
<b>Investigation Docket:</b>	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).