



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Phoenix, AZ	<b>Accident Number:</b>	LAX04CA200
<b>Date &amp; Time:</b>	05/01/2004, 0630 MST	<b>Registration:</b>	N2493Q
<b>Aircraft:</b>	Cessna 182K	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The airplane experienced a hard landing and veered off the runway. The pilot began a standard stabilized approach and intended to level off about 10 feet above ground level, in an effort to let the airspeed gradually slow down. The airplane continued in a descent faster than the pilot anticipated, and the airplane hit the runway surface hard. The airplane bounced back into the air and porpoised down the runway, veering to the right. The airplane continued off of the runway into a dirt area and impacted a taxiway sign. The pilot reported no preimpact mechanical malfunctions or failures with the airplane.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate flare, which resulted in a hard landing. Also causal was the pilot's inadequate recovery from a bounced landing, which resulted in an inadvertent porpoise and collision with a sign.

## Findings

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Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FLARE - INADEQUATE - PILOT IN COMMAND
2. (C) RECOVERY FROM BOUNCED LANDING - INADEQUATE - PILOT IN COMMAND
3. (C) PORPOISE/PILOT-INDUCED OSCILLATION - INADVERTENT - PILOT IN COMMAND
4. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #2: OVERRUN

Phase of Operation: LANDING - ROLL

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Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

5. OBJECT - SIGN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	45, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 3	<b>Last FAA Medical Exam:</b>	05/06/2003
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	298 hours (Total, all aircraft), 101 hours (Total, this make and model), 8 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N2493Q
<b>Model/Series:</b>	182K	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18257693
<b>Landing Gear Type:</b>	Tricycle	<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>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>		<b>Engine Model/Series:</b>	O-470 -R65B
<b>Registered Owner:</b>	Arizona Cloudbusters Inc.	<b>Rated Power:</b>	
<b>Operator:</b>	Arizona Cloudbusters Inc.	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Chandler, AZ (P19)	Type of Flight Plan Filed:	None
Destination:	Phoenix, AZ (DVT)	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class D

## Airport Information

Airport:	Phoenix Deer Valley Airport (DVT)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	07R	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 None	Latitude, Longitude:	33.688056, -112.082500

## Administrative Information

Investigator In Charge (IIC):	Nicole Charnon	Report Date:	07/29/2004
Additional Participating Persons:	Jack Ogle; Federal Aviation Administration; Scottsdale, AZ		
Publish Date:			
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	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:pubinquiry@ntsb.gov">pubinquiry@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](#).