



# Aviation Investigation Final Report

<b>Location:</b>	Bakersfield, California	<b>Accident Number:</b>	LAX06CA237
<b>Date &amp; Time:</b>	July 18, 2006, 19:40 Local	<b>Registration:</b>	N4785M
<b>Aircraft:</b>	Beech A36	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot made a hard landing resulting in substantial damage to the airplane. The pilot extended his downwind for landing at the destination airport with the intention of avoiding the wake turbulence produced by a jet departing the runway of intended use. While in the landing flare, the pilot stalled the airplane, resulting in a hard landing. The right main landing gear collapsed and the airplane rolled off the runway surface. The pilot reported no preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper flare, which resulted in a hard landing.

## Findings

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

- Findings
1. TERRAIN CONDITION - RUNWAY
  2. (C) FLARE - IMPROPER - PILOT IN COMMAND
  3. (C) AIRSPEED(VSO) - NOT MAINTAINED - PILOT IN COMMAND
  4. STALL/MUSH - INADVERTENT - PILOT IN COMMAND



## Factual Information

On July 18, 2006, about 1940 Pacific daylight time, a Beech A36, N4785M, made a hard landing at the Meadows Field Airport, Bakersfield, California. The pilot/owner was operating the airplane under the provisions of 14 CFR Part 91. The private pilot and two passengers were not injured; the airplane sustained substantial damage. The personal local flight departed from Bakersfield airport about 1900. Visual meteorological conditions prevailed, and a flight plan had not been filed.

In a written statement, the pilot reported that he had requested and had consequently been granted by air traffic control a downwind extension for runway 30R, in order to compensate for the possible wake turbulence produced by the regional jet departing on the same runway. The pilot stated that on short final, the airplane was hit by wake turbulence just prior to touchdown, causing a hard landing and the subsequent collapse of the right main landing gear. The airplane rolled off the runway surface and incurred damage to the right main landing gear and the right wing.

The pilot reported no preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The Federal Aviation Administration Flight Standards District Office, Fresno, California, upgraded the original damage report from minor to substantial upon further assessment of the airplane.

According to the air traffic controller who was in contact with the accident airplane, he cleared the pilot to land while the airplane was on the downwind leg of the traffic pattern. After giving the pilot a clearance, he issued a wake turbulence advisory regarding a departing MD80 airplane. The controller additionally advised the pilot that he could extend the downwind leg at his discretion to avoid wake turbulence. He observed the pilot extend the downwind leg and continue onto final approach. As the airplane approached the runway threshold, the nose was in an excessive nose-high pitch attitude and traveling very slowly. The wings started to rock back and forth. The right wing dropped, and the airplane immediately descended toward the runway surface. The airplane landed hard on the right main landing gear, resulting in it separating from the airplane.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	40, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3	<b>Last FAA Medical Exam:</b>	January 1, 2004
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	153 hours (Total, all aircraft), 17 hours (Total, this make and model), 29 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N4785M
<b>Model/Series:</b>	A36	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Utility	<b>Serial Number:</b>	E-1261
<b>Landing Gear Type:</b>	Retractable - 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>	IO-520
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	
<b>Operator:</b>	On file	<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>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Bakersfield, CA (BFL )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Bakersfield, CA (BFL )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Meadows Field Airport BFL	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	30R	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	35.433334,-119.056663

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Keliher, Zoe
<b>Additional Participating Persons:</b>	Roy Hardie; Federal Aviation Administration; Fresno, CA
<b>Original Publish Date:</b>	October 31, 2006
<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.ntsb.gov/Docket?ProjectID=64149">https://data.ntsb.gov/Docket?ProjectID=64149</a>

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