



National Transportation Safety Board Aviation Accident Final Report

Location:	Truckee, CA	Accident Number:	WPR09CA055
Date & Time:	12/02/2008, 1420 PST	Registration:	N172MN
Aircraft:	CESSNA 172RG	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that during a normal approach to landing he misjudged the height between the airplane and the runway during the flare and the airplane settled onto the runway hard. The airplane bounced and the pilot said he lowered the nose and the airplane entered a porpoise followed by the propeller contacting the runway. The firewall sustained substantial damage. The pilot said there were no pre impact mechanical malfunctions or failures.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot misjudged the landing flare resulting in a hard landing.

Findings

Aircraft	Landing flare - Not attained/maintained (Cause)
Personnel issues	Incorrect action performance - Pilot (Cause) Identification/recognition - Pilot (Cause)

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
-------------------------	-------------------------------

Pilot Information

Certificate:	Private	Age:	69, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last Medical Exam:	03/05/2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	09/30/2008
Flight Time:	274 hours (Total, all aircraft), 40 hours (Total, this make and model), 136 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N172MN
Model/Series:	172RG	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	172RG0268
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	07/31/2008, Annual	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	6563 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360
Registered Owner:	FAY JEFFREY	Rated Power:	180 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	TRK, 5900 ft msl	Observation Time:	1445 PST
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Scattered / 12000 ft agl	Temperature/Dew Point:	11°C / -9°C
Lowest Ceiling:	None	Visibility	9 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:	30.2 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Beckwourth, CA (O02)	Type of Flight Plan Filed:	Unknown
Destination:	Truckee, CA (TRK)	Type of Clearance:	None
Departure Time:	1400 PST	Type of Airspace:	

Airport Information

Airport:	Truckee-Tahoe Airport (TRK)	Runway Surface Type:	Asphalt
Airport Elevation:	5900 ft	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	4650 ft / 75 ft	VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None		

Administrative Information

Investigator In Charge (IIC):	Patrick H Jones	Adopted Date:	01/29/2009
Additional Participating Persons:	Lee Oscar; Federal Aviation Administration; Reno, NV		
Publish Date:	01/29/2009		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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.