



# National Transportation Safety Board Aviation Accident Data Summary

---

<b>Location:</b>	Berrien Springs, MI	<b>Accident Number:</b>	CHI05CA060
<b>Date &amp; Time:</b>	02/01/2005, 0850 EST	<b>Registration:</b>	N9515B
<b>Aircraft:</b>	Cessna 172RG	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

---

## Analysis

The airplane, piloted by a private pilot receiving instruction from a certified flight instructor (CFI), sustained substantial damage during a hard landing following a simulated loss of engine power during takeoff and subsequent emergency landing after takeoff. The pilot's accident report stated, "On climb out, the air speed was held between 63 and 65 knots (Vy). To simulate an engine failure, the CFI reduced the throttle. Immediately upon noticing the loss of power, I lowered the nose of the aircraft to avoid loss of airspeed and to avoid a wing stall. While maintaining control of the aircraft, altitude was lost. An attempt was made to flare the aircraft before contact with the runway. Subsequently, a hard landing was made, and the aircraft came to a complete stop on the runway." The CFI's accident report stated, "We then made a short field takeoff and during the takeoff I simulated an engine failure. We immediately pushed the nose over but with insufficient airspeed we developed a high sink rate and made a hard landing." The CFI stated that there were no mechanical malfunctions associated with the airplane during the flight. The wind was calm.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot not maintaining airspeed leading to an excessive sink rate during a simulated emergency landing after takeoff. An additional cause was the certified flight instructor's inadequate supervision.

## Findings

Occurrence #1: HARD LANDING  
Phase of Operation: LANDING

### Findings

1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND
2. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
3. (C) DESCENT - EXCESSIVE - PILOT IN COMMAND
4. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

## Flight Instructor Information

Certificate:	Commercial	Age:	49
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	4260 hours (Total, all aircraft), 255 hours (Total, this make and model), 4074 hours (Pilot In Command, all aircraft), 64 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Pilot Information

Certificate:	Age:
Airplane Rating(s):	Instrument Rating(s):
Other Aircraft Rating(s):	Instructor Rating(s):
Flight Time:	

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9515B
Model/Series:	172RG	Engines:	1 Reciprocating
Operator:	Andrews University	Engine Manufacturer:	Lycoming
Operating Certificate(s) Held:	None	Engine Model/Series:	O-360-F1A6
Flight Conducted Under:	Part 91: General Aviation - Instructional		

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	BEH, 643 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 6500 ft agl	Wind Speed/Gusts, Direction:	Calm / ,
Temperature:	-5 °C	Visibility	4 Miles
Precipitation and Obscuration:			
Departure Point:	Berrien Springs, MI (C20)	Destination:	(C20)

## Airport Information

Airport:	Runway Surface Type:
Runway Used:	Runway Surface Condition:
Runway Length/Width:	

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	41.951667, -86.367778		

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Edward F Malinowski	<b>Adopted Date:</b>	03/30/2005
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.		
<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> .		

---

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.