



National Transportation Safety Board Aviation Accident Final Report

Location:	Daytona Beach, FL	Accident Number:	MIA06CA014
Date & Time:	11/01/2005, 1136 EST	Registration:	N442ER
Aircraft:	Cessna 172S	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The airplane landed hard. According to the pilot he did not apply adequate back-pressure to the control yoke during the landing flare and because of this, I bounced very roughly." He also stated that he executed a go-around after the hard landing, flew another traffic pattern, and landed without further incident. Postflight examination of the airplane revealed damage to the airplane's firewall. The pilot stated that prior to the accident there were no mechanical failures or malfunctions to the airplane, or any of its systems.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilots inadequate landing flare/touchdown which resulted in a hard landing.

Findings

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

Findings

1. (C) FLARE - INADEQUATE - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Student	Age:	19, Male
Airplane Rating(s):	None	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:	Class 1	Last Medical Exam:	09/01/2004
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	32 hours (Total, all aircraft), 29 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Cessna	Registration:	N442ER
Model/Series:	172S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17258936
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	IO-360-L2A
Registered Owner:	General Electric Finance Corporation	Rated Power:	
Operator:	EMBRY RIDDLE AERONAUTICAL UNIVERSITY	Air Carrier Operating Certificate:	None
Operator Does Business As:		Operator Designator Code:	NX4S

Meteorological Information and Flight Plan

Observation Facility, Elevation:		Observation Time:	
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:		Temperature/Dew Point:	
Lowest Ceiling:		Visibility	
Wind Speed/Gusts, Direction:		Visibility (RVR):	
Altimeter Setting:		Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Melbourne, FL (KMLB)	Type of Flight Plan Filed:	None
Destination:	Daytona Beach, FL (KDAB)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Daytona Beach International (KDAB)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	7R	IFR Approach:	Visual
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		

Administrative Information

Investigator In Charge (IIC):	John W Lovell	Adopted Date:	02/28/2006
Additional Participating Persons:			
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 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.