



National Transportation Safety Board Aviation Accident Final Report

Location:	PALO ALTO, CA	Accident Number:	LAX91LA379
Date & Time:	09/01/1991, 0838 PDT	Registration:	N89022
Aircraft:	CESSNA C-152	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

THE STUDENT PILOT LANDED HARD AND BOUNCED THE AIRPLANE BACK INTO THE AIR ABOUT 20 FEET. THE INSTRUCTOR TOOK OVER THE CONTROLS BUT WAS UNABLE TO GAIN CONTROL OF THE AIRPLANE BEFORE IT STALLED AND STRUCK THE RUNWAY WITH THE LEFT WING AND TAIL. THE AIRPLANE THEN DEPARTED THE LEFT SIDE OF THE RUNWAY, STRIKING A RUNWAY LIGHT. THERE WERE NO MECHANICAL FAILURES OR MALFUNCTIONS WITH THE AIRPLANE BEFORE THE ACCIDENT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: IMPROPER RECOVERY FROM A BOUNCED LANDING BY THE STUDENT PILOT AND THE DELAYED REMEDIAL ACTION OF THE INSTRUCTOR PILOT. CONTRIBUTING TO THIS ACCIDENT WAS THE STUDENT PILOT'S FAILURE TO MAINTAIN THE PROPER DESCENT RATE WHICH RESULTED IN A BOUNCED LANDING AND THE CERTIFIED INSTRUCTOR PILOT'S INADEQUATE SUPERVISION DURING THE LANDING.

Findings

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) PROPER DESCENT RATE - NOT MAINTAINED - DUAL STUDENT
2. (F) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (C) RECOVERY FROM BOUNCED LANDING - IMPROPER - DUAL STUDENT
4. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. TERRAIN CONDITION - RUNWAY

Factual Information

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	32, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/04/1991
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2062 hours (Total, all aircraft), 1450 hours (Total, this make and model), 1923 hours (Pilot In Command, all aircraft), 179 hours (Last 90 days, all aircraft), 65 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N89022
Model/Series:	C-152 C-152	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	82599
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	08/27/1991, 100 Hour	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	2 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4163 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-235-N2C
Registered Owner:	MAIN, STANLEY G.	Rated Power:	108 hp
Operator:	MAIN, STANLEY G.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 900 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	18° C / 16° C
Precipitation and Obscuration:			
Departure Point:	SAN CARLOS, CA (SQL)	Type of Flight Plan Filed:	None
Destination:	PALO ALTO, CA (PAO)	Type of Clearance:	None
Departure Time:	0820 PDT	Type of Airspace:	Class D

Airport Information

Airport:	PALO ALTO (PAO)	Runway Surface Type:	Asphalt
Airport Elevation:	5 ft	Runway Surface Condition:	Dry
Runway Used:	3	IFR Approach:	None
Runway Length/Width:	2500 ft / 65 ft	VFR Approach/Landing:	Full Stop

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
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Thomas H Wilcox	Report Date:	05/03/1993
Additional Participating Persons:			
Publish Date:			
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/ .		

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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](#).