



National Transportation Safety Board Aviation Accident Final Report

Location:	LAWRENCE, MA	Accident Number:	NYC99LA086
Date & Time:	04/02/1999, 0856 EST	Registration:	N66162
Aircraft:	Cessna 172P	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

After a dual instructional flight, the student pilot (SP) departed for his first solo flight. The SP was attempting a touch and go landing, when the airplane's nose wheel contacted the runway, and the airplane bounced back up into the air. The airplane bounced two to three times, and its propeller struck the runway. The airplane came to rest on the runway. Examination of the airplane did not reveal evidence of any pre-impact mechanical malfunctions of the airframe or engine. The airplane's nose gear had been driven up into the fuselage, damaging the firewall. The SP reported 35 hours of total flight experience, of which, 24 hours were in the past 90 days.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's improper flare, and his improper recover from a bounced landing.

Findings

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

Findings

1. (C) FLARE - IMPROPER - PILOT IN COMMAND
2. (C) RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND

Factual Information

On April 2, 1999, about 0856 eastern standard time, a Cessna 172P, N66162, was substantially damaged while landing at the Lawrence Municipal Airport, Lawrence, Massachusetts. The certificated student pilot (SP) was not injured. Visual meteorological conditions prevailed and no flight plan had been filed for the local instructional flight conducted under 14 CFR Part 91.

According to the CFI, after a dual flight lesson, which included touch and go landings, balked landings, and go-arounds, he felt the SP was ready for his first solo flight. The SP stated his intent was to perform a touch and go landing, and then a landing to a full stop.

The CFI observed the flight from the ground. He stated the airplane entered the traffic pattern for runway 5, and the SP's approach seemed very standard and normal. He further stated:

"...the flare and round out seemed a little flat. The nose wheel of the aircraft made contact with the runway, this caused the aircraft to porpoise back up into the air. The oscillations got worse and worse until finally the propeller made contact with the runway. I estimate about three bounces before the [propeller] struck the runway."

The airplane came to rest on the runway.

The SP stated he believed he landed a "little too fast," which caused the airplane to balloon, and bounce.

Examination of the airplane by an FAA Inspector did not reveal evidence of any pre-impact mechanical malfunctions of the airframe or engine. The airplane's nose gear had been driven up into the fuselage, damaging the firewall.

The SP reported 35 hours of total flight experience, of which, 24 hours were in the past 90 days.

Pilot Information

Certificate:	Student	Age:	43, Male
Airplane Rating(s):	None	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 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/26/1999
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	35 hours (Total, all aircraft), 24 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N66162
Model/Series:	172P 172P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17275973
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:	75 Hours	Engines:	1 Reciprocating
Airframe Total Time:	7000 Hours	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	O-320
Registered Owner:	FOUR STAR AVIATION	Rated Power:	180 hp
Operator:	FOUR STAR AVIATION	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LWM, 148 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0850 EST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Overcast / 4300 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	80°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	8° C / -2° C
Precipitation and Obscuration:			
Departure Point:	(LWM)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0853 EST	Type of Airspace:	Class D

Airport Information

Airport:	LAWRENCE MUNICIPAL (LWM)	Runway Surface Type:	Asphalt
Airport Elevation:	148 ft	Runway Surface Condition:	Dry
Runway Used:	5	IFR Approach:	None
Runway Length/Width:	5000 ft / 159 ft	VFR Approach/Landing:	Touch and Go; 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	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	LUKE SCHIADA	Report Date:	08/10/2000
Additional Participating Persons:	CHRISTY M MEHEGAN; BEDFORD, MA		
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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