



National Transportation Safety Board Aviation Accident Final Report

Location:	Pontiac, MI	Accident Number:	CHI03LA294
Date & Time:	09/02/2003, 1506 EDT	Registration:	N757GL
Aircraft:	Cessna 152	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The nose landing gear collapsed during a recovery from a bounced landing. The student pilot reported that he was practicing landings on runway 9L, and upon touchdown during the second landing attempt, the airplane "bounced into the air". The pilot stated the airplane settled back to the runway and the nose landing gear touched down prior to the main landing gear. The pilot reported that the nose landing gear "folded and the aircraft veered to the left edge of the runway and then to the right[,] stopping in the middle of the runway." The student pilot reported his total flight time was 179 hours, of which 52 hours were as pilot-in-command. The pilot had flown 22 hours during the previous 90 days and 14 hours during the previous 30 days. Besides the accident flight, the pilot had not flown during the previous 24 hours. The local winds approximately 13 minutes prior to the accident were 060 degrees true at 10 knots gusting to 15 knots. The local winds approximately 26 minutes after the accident were 120 degrees true at 7 knots, winds direction variable between 100 and 160 degrees.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's inadequate recovery from the bounced landing. Factors contributing to the accident were the variable crosswind, the misjudged flare that resulted in the bounced landing and the subsequent collapse of the nose landing gear.

Findings

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - CROSSWIND
2. (F) WEATHER CONDITION - VARIABLE WIND
3. (F) FLARE - MISJUDGED - PILOT IN COMMAND

Occurrence #2: NOSE GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. (C) RECOVERY FROM BOUNCED LANDING - INADEQUATE - PILOT IN COMMAND
5. (F) LANDING GEAR, NOSE GEAR - OVERLOAD

Occurrence #3: NOSE DOWN

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On September 2, 2003, at 1506 eastern daylight time, a Cessna 152, N757GL, piloted by a student pilot, sustained substantial damage when the nose landing gear collapsed while landing on runway 9L (5,000 feet by 100 feet, asphalt) at the Oakland County International Airport (PTK), Pontiac, Michigan. Visual meteorological conditions prevailed at the time of the accident. The solo-instructional flight was operating under the provisions of 14 CFR Part 91 without a flight plan. The pilot reported no injuries. The local flight originated from PTK at 1320.

According to the student pilot's written statement, he was practicing landings on runway 9L, and upon touchdown during the second landing attempt, the airplane "bounced into the air". The pilot stated the airplane settled back to the runway and the nose landing gear touched down prior to the main landing gear. The pilot reported that the nose landing gear "folded and the aircraft veered to the left edge of the runway and then to the right[,] stopping in the middle of the runway."

The student pilot reported his total flight time was 179 hours, of which 52 hours were as pilot-in-command. The pilot had flown 22 hours during the previous 90 days and 14 hours during the previous 30 days. Besides the accident flight, the pilot had not flown during the previous 24 hours.

The PTK automated surface observing system (ASOS) recorded the following information:

At 1453: Wind 060 degrees true at 6 knots gusting to 15 knots; 10 statute mile visibility; few clouds at 4,000 feet above ground level (agl), scattered clouds at 9,000 feet agl; temperature 24 degrees Celsius; dew point of 11 degrees Celsius; altimeter 30.12 inches of mercury.

At 1532: Wind 120 degrees true at 7 knots, wind direction variable between 100 and 160 degrees; 10 statute mile visibility; scattered clouds at 4,000 feet agl, scattered clouds at 25,000 feet agl; temperature 24 degrees Celsius; dew point of 11 degrees Celsius; altimeter 30.10 inches of mercury.

Pilot Information

Certificate:	Student	Age:	75, 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--w/ waivers/lim.	Last FAA Medical Exam:	06/03/2003
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	179 hours (Total, all aircraft), 179 hours (Total, this make and model), 52 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N757GL
Model/Series:	152	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	15279728
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	08/19/2003, 100 Hour	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	10032 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:	Pontiac Flight Service, Inc.	Rated Power:	110 hp
Operator:	Pontiac Flight Service, Inc.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PTK, 980 ft msl	Distance from Accident Site:	
Observation Time:	1453 EDT	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 4000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	24° C / 11° C
Precipitation and Obscuration:			
Departure Point:	Pontiac, MI (PTK)	Type of Flight Plan Filed:	None
Destination:	Pontiac, MI (PTK)	Type of Clearance:	VFR
Departure Time:	1320 EDT	Type of Airspace:	Class D

Airport Information

Airport:	Oakland County International (PTK)	Runway Surface Type:	Asphalt
Airport Elevation:	980 ft	Runway Surface Condition:	Dry
Runway Used:	9L	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 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	Latitude, Longitude:	42.665278, -83.418611

Administrative Information

Investigator In Charge (IIC):	Andrew T Fox	Report Date:	03/02/2004
Additional Participating Persons:	Glenn A Shaw; Federal Aviation Administration - Detroit FSDO; Belleville, MI		
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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