



# Aviation Investigation Final Report

<b>Location:</b>	LUZERNE, Michigan	<b>Accident Number:</b>	CHI00LA242
<b>Date &amp; Time:</b>	August 4, 2000, 21:00 Local	<b>Registration:</b>	N395ES
<b>Aircraft:</b>	Cessna 172R	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The airplane was damaged during a nose over following a nose gear collapse while landing. The pilot said that during landing the '... plane ballooned and gained noticeable altitude. At this point I [the pilot] determined that it was too late to do a go-around. During the attempt to get on the runway, main gear contact was made very hard, bouncing plane airborne. Then the plane porpoised down the runway until the nose gear collapsed.' The pilot indicated no mechanical failure or malfunction in his report of the accident. A postaccident examination of the aircraft failed to reveal any anomalies that could be associated with a preexisting condition. The pilot's airman certificate was issued on July 6, 2000. The pilot listed, in his written report, 88.1 hours total flight time and 29.9 hours as pilot in command.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the misjudged flare and porpoise encountered during landing by the pilot. A factor to the accident was the collapse of the nose gear.

### Findings

Occurrence #1: HARD LANDING  
Phase of Operation: LANDING

#### Findings

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

2. (C) PORPOISE/PILOT-INDUCED OSCILLATION - ENCOUNTERED - PILOT IN COMMAND

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Occurrence #2: NOSE GEAR COLLAPSED

Phase of Operation: LANDING

Findings

3. (F) LANDING GEAR, NOSE GEAR - COLLAPSED

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Occurrence #3: NOSE OVER

Phase of Operation: LANDING

## Factual Information

On August 4, 2000, at 2100 eastern daylight time, a Cessna 172R, N395ES, piloted by a private pilot, sustained substantial damage during a nose over following a nose gear collapse while landing on runway 36 (2,600 feet by 100 feet, dry turf), at the Lost Creek Airport (5Y4), Luzerne, Michigan. The 14 CFR Part 91 personal flight was on a visual flight rules flight plan. Visual meteorological conditions prevailed at the time of the accident. The pilot, who was the sole occupant, reported no injuries. The flight originated from the South Bend Regional Airport, South Bend, Indiana at 1815 and was en route to 5Y4.

In a written statement, the pilot said that during landing the "... plane ballooned and gained noticeable altitude. At this point I [the pilot] determined that it was too late to do a go-around. During the attempt to get on the runway, main gear contact was made very hard, bouncing plane airborne. Then the plane porpoised down the runway until the nose gear collapsed." The pilot indicated no mechanical failure or malfunction in his report of the accident.

A postaccident examination of the aircraft failed to reveal any anomalies that could be associated with a preexisting condition.

The pilot's airman certificate was issued on July 6, 2000. The pilot listed, in his written report, 88.1 hours total flight time and 29.9 hours as pilot in command.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	56, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	July 7, 1999
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	88 hours (Total, all aircraft), 88 hours (Total, this make and model), 30 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N395ES
<b>Model/Series:</b>	172R 172R	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	17280144
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	January 10, 2000 Annual	<b>Certified Max Gross Wt.:</b>	2450 lbs
<b>Time Since Last Inspection:</b>	70 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	668 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-360-L2A
<b>Registered Owner:</b>	S AND B AVIATION INC.	<b>Rated Power:</b>	160 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Dusk
<b>Observation Facility, Elevation:</b>	HTL ,1150 ft msl	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	20:55 Local	<b>Direction from Accident Site:</b>	226°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	19°C / 12°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	SOUTH BEND , IN (SBN )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	(5Y4 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	18:15 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	LOST CREEK AIRPORT 5Y4	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	1051 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	36	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2600 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	44.610797,-84.26094(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Brannen, John
<b>Additional Participating Persons:</b>	WESLEY H CRAFT; GRAND RAPIDS , MI
<b>Original Publish Date:</b>	April 25, 2001
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	The NTSB traveled to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=49921">https://data.ntsb.gov/Docket?ProjectID=49921</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).