Aviation Investigation Final Report

Location:	Louisville, Kentucky	**Accident Number:**	ERA11LA386
Date & Time:	July 2, 2011, 14:30 Local	**Registration:**	N8319N
Aircraft:	Piper PA-32R-301	**Aircraft Damage:**	Substantial
Defining Event:	Hard landing	**Injuries:**	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot performed a steep descent while on approach, and the airplane touched down on the runway and bounced. The left landing gear collapsed, and the airplane veered off the left side of the runway, where it struck a taxiway sign and sustained substantial damage to its fuselage and both wings. When interviewed after the accident, the pilot did not report experiencing any mechanical malfunctions. However, he subsequently reported that the engine did not respond to a throttle control input after the airplane bounced and that he was not certain whether he experienced any mechanical malfunctions. Examination of the engine did not reveal any preimpact malfunctions. The airplane had been operated for about 20 hours since its most recent annual inspection, which was performed about 4 months prior to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper flare and inadequate recovery from a bounced landing, which resulted in a landing gear collapse.

Findings

Aircraft	Landing flare - Incorrect use/operation
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Landing gear collapse
Landing	Runway excursion
Landing	Collision with terr/obj (non-CFIT)

On July 2, 2011, about 1430 eastern daylight time, a Piper PA-32R-301, N8319N, operated by a private pilot, was substantially damaged while landing at Bowman Field Airport (LOU), Louisville, Kentucky. The certificated private pilot and three passengers were not injured. Visual meteorological conditions prevailed and an instrument flight rules flight plan was filed for the personal flight that was conducted under the provisions of 14 Code of Federal Regulations Part 91.

The airplane was on approach to runway 24, a 4,326-foot-long, 75-foot-wide, asphalt, runway.

According to a Federal Aviation Administration (FAA) inspector, the pilot reported that the airplane was high and he utilized a steep descent to approach the runway. The airplane touched down on the runway, and bounced. The left landing gear collapsed, and the airplane veered off the left side of the runway, where it struck a taxiway sign, and sustained substantial damage to its fuselage and both wings.

The pilot did not report experiencing any mechanical malfunctions when interviewed by an FAA inspector after the accident. In a written statement, he subsequently reported that he performed a rapid turn and descent to the runway after the airplane was cleared for a left base to final approach. The pilot further stated that the engine did not respond to a throttle control input after the airplane bounced, and he was not certain if he experienced any mechanical malfunctions.

The airplane was equipped with a Lycoming IO-540 series, 300-horsepower engine.

Subsequent examination of the airframe and engine by an FAA inspector did not reveal any mechanical abnormalities. The engine was rotated by hand via the propeller, which remained attached and displayed curled tips on both blades. Thumb compression was attained on all cylinders and spark was observed at all spark plug ignition leads. Examination of the throttle and mixture controls did not reveal any discrepancies, and fuel flow was observed from all fuel injector lines when the boost pump was activated.

The airplane had been operated for about 20 hours since its most recent annual inspection, which was performed on February 24, 2011.

The pilot reported 3,800 hours of total flight experience, which included 3,600 hours in the same make and model as the accident airplane.

Pilot Information

Certificate:	Private	**Age:**	78,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	February 24, 2011
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	May 30, 2011
Flight Time:	3800 hours (Total, all aircraft), 3600 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N8319N
Model/Series:	PA-32R-301	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	32R-8113029
Landing Gear Type:		**Seats:**	6
Date/Type of Last Inspection:	February 24, 2011 Annual	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:	20 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3856 Hrs at time of accident	**Engine Manufacturer:**	LYCOMING
ELT:	Installed, not activated	**Engine Model/Series:**	IO-540 SER
Registered Owner:	On file	**Rated Power:**	300 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	LOU,546 ft msl	**Distance from Accident Site:**	
Observation Time:	14:04 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	290°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.09 inches Hg	**Temperature/Dew Point:**	31°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Melbourne, FL (MLB)	**Type of Flight Plan Filed:**	IFR
Destination:	Louisville, KY (LOU)	**Type of Clearance:**	IFR
Departure Time:	09:15 Local	**Type of Airspace:**	

Airport Information

Airport:	Bowman Field LOU	**Runway Surface Type:**	Asphalt
Airport Elevation:	546 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	24	**IFR Approach:**	Global positioning system
Runway Length/Width:	4326 ft / 75 ft	**VFR Approach/Landing:**	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	3 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	4 None	**Latitude, Longitude:**	38.227779,-85.663612

Administrative Information

Investigator In Charge (IIC):	Schiada, Luke
Additional Participating Persons:	Samuel B Weatherford; FAA/FSDO; Lousiville, KY
Original Publish Date:	February 16, 2012
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=81028