



Aviation Investigation Final Report

Location:	Knox, Indiana	Accident Number:	GAA18CA195
Date & Time:	March 21, 2018, 16:55 Local	Registration:	N6785P
Aircraft:	Piper PA24	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that, during landing, while the student pilot was flying, the airplane ballooned. He added that he took the flight controls and landed on the runway.

The airplane sustained substantial damage to the left wing.

The flight instructor reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The flight instructor's improper landing flare, which resulted in a hard landing.

Findings

Aircraft	Landing flare - Not attained/maintained
Personnel issues	Aircraft control - Instructor/check pilot

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Abnormal runway contact

Student pilot Information

Certificate:	Student	Age:	40, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	October 11, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 35 hours (Total, all aircraft), 7.3 hours (Total, this make and model), 14.5 hours (Last 90 days, all aircraft), 4.3 hours (Last 30 days, all aircraft), 1.8 hours (Last 24 hours, all aircraft)		

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	54, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	October 2, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 1, 2017
Flight Time:	(Estimated) 2024 hours (Total, all aircraft), 15 hours (Total, this make and model), 1896.4 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N6785P
Model/Series:	PA24 250	Aircraft Category:	Airplane
Year of Manufacture:	1960	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-1916
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	November 1, 2017 Annual	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	6049.1 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-540-A
Registered Owner:	On file	Rated Power:	250 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:	KPPO, 811 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	21:55 Local	Direction from Accident Site:	348°
Lowest Cloud Condition:	Clear	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	16 knots / 20 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	2°C / -8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GRIFFITH, IN (05C)	Type of Flight Plan Filed:	None
Destination:	Knox, IN (OXI)	Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	STARKE COUNTY OXI	Runway Surface Type:	Asphalt
Airport Elevation:	684 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	4401 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	41.325553,-86.662223(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Kris Kortokrax; FAA; DuPage, IL
Original Publish Date:	July 5, 2018
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=96967

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