



Aviation Investigation Final Report

Location:	Ocala, Florida	Accident Number:	ERA20CA147
Date & Time:	February 28, 2020, 10:50 Local	Registration:	N677NA
Aircraft:	Zenair CH 2000	Aircraft Damage:	Substantial
Defining Event:	Abnormal runway contact	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot reported that, during landing, the airplane "bounced" and that "out of instinct," he pushed the yoke down to try and "get the plane down," which resulted in the nosewheel collapsing and the propeller striking the runway. The airplane sustained substantial damage to the forward fuselage. The operator 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 student pilot's improper landing flare and subsequent improper recovery from a bounced landing, which resulted in the nosewheel collapsing.

Findings

Personnel issues	Aircraft control - Student/instructed pilot
Personnel issues	Incorrect action performance - Student/instructed pilot
Aircraft	Landing flare - Not attained/maintained

Factual Information

History of Flight

Landing-flare/touchdown	Abnormal runway contact (Defining event)
Landing-flare/touchdown	Landing gear collapse
Landing-flare/touchdown	Dragged wing/rotor/float/other

Pilot Information

Certificate:	Student	Age:	23, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	August 9, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	84 hours (Total, all aircraft), 84 hours (Total, this make and model), 9 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Zenair	Registration:	N677NA
Model/Series:	CH 2000	Aircraft Category:	Airplane
Year of Manufacture:	2004	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20-1029
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	February 23, 2020 Annual	Certified Max Gross Wt.:	1692 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3347 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	O235-N2C
Registered Owner:	Midwest Airsales Inc	Rated Power:	116 Horsepower
Operator:	Orlando Aviators Flying Club Inc	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	OCF,87 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	10:51 Local	Direction from Accident Site:	237°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.29 inches Hg	Temperature/Dew Point:	12°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Orlando, FL (ORL)	Type of Flight Plan Filed:	None
Destination:	Ocala, FL (OCF)	Type of Clearance:	VFR
Departure Time:	09:59 Local	Type of Airspace:	Class D

Airport Information

Airport:	Ocala Intl-Jim Taylor Field OCF	Runway Surface Type:	Asphalt
Airport Elevation:	89 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	7467 ft / 150 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	29.171943,-82.224166(est)

Administrative Information

Investigator In Charge (IIC):	Brazy, Douglass
Additional Participating Persons:	Michael Corrigan; FAA/FSDO ; Orlando, FL
Original Publish Date:	August 27, 2020
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=101155

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](#).