



# Aviation Investigation Final Report

<b>Location:</b>	Topeka, Kansas	<b>Accident Number:</b>	GAA19CA006
<b>Date &amp; Time:</b>	October 5, 2018, 20:45 Local	<b>Registration:</b>	N642AM
<b>Aircraft:</b>	Zenair CH 2000	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Abnormal runway contact	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that, following his first solo flight in the recently acquired airplane, during landing, the airplane crossed the runway threshold about 70 knots airspeed with full flaps, and he placed the throttle in the idle position. During the landing flare, the airplane sank abruptly and touched down hard. The airplane bounced and exited the left side of the runway. The pilot attempted to go around, but the airplane descended and impacted the grass safety area on the left side of the runway. The nose landing gear separated from the airplane.

The airplane sustained substantial damage to the right fuselage formers.

The pilot reported that there were no mechanical malfunctions or failures 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 pilot's improper landing flare, which resulted in a hard, bounced landing and a subsequent runway excursion.

## Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Landing flare - Not attained/maintained

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Hard landing
<b>Landing-flare/touchdown</b>	Abnormal runway contact (Defining event)
<b>Landing-flare/touchdown</b>	Runway excursion
<b>Landing-flare/touchdown</b>	Attempted remediation/recovery
<b>Landing-flare/touchdown</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	57,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>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	BasicMed With waivers/limitations	<b>Last FAA Medical Exam:</b>	August 23, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	September 16, 2018
<b>Flight Time:</b>	(Estimated) 222 hours (Total, all aircraft), 3 hours (Total, this make and model), 159 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Zenair	<b>Registration:</b>	N642AM
<b>Model/Series:</b>	CH 2000 Undesignat	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2000	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	None	<b>Serial Number:</b>	20-0053
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	August 7, 2018 Annual	<b>Certified Max Gross Wt.:</b>	1692 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1866.5 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	C91A installed	<b>Engine Model/Series:</b>	O-235-N2C
<b>Registered Owner:</b>		<b>Rated Power:</b>	116 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>	KTOP,885 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	01:53 Local	<b>Direction from Accident Site:</b>	327°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 6000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	3 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	170°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.8 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 20°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Lawrence, KS (LWC )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Topeka, KS (TOP )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	07:30 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	PHILIP BILLARD MUNI TOP	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	881 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4331 ft / 75 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>	39.068889,-95.622497(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	Timothy Chanay; FAA; Wichita, KS
<b>Original Publish Date:</b>	September 26, 2019
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=98427">https://data.nts.gov/Docket?ProjectID=98427</a>

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