



# **Aviation Investigation Final Report**

Location: ST. LOUIS, Missouri Accident Number: CHI00LA005

Date & Time: October 6, 1999, 09:00 Local Registration: N25ZA

Aircraft: Zenair CH 2000 Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Instructional

### **Analysis**

The student pilot reported that the airplane bounced during a landing. The student stated he heard a 'thump' and he took off again, bringing the airplane around for an uneventful landing. The accident occurred on the student's third solo instructional flight. Winds reported 7 minutes prior to the accident, at the St. Louis Lambert International Airport, 9 miles east of the accident site were calm.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the student pilot misjudged the landing flare which resulted in a hard landing. A factor associated with the accident was the student's lack of total experience.

#### **Findings**

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

**Findings** 

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

2. (F) LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

#### **Factual Information**

On October 6, 1999, at 0900 central daylight time, a Zenair Ltd. CH 2000, N25ZA, operated by Creve Coeur Aviation experienced a hard landing on runway 16 at the Creve Coeur Airport, St. Louis, Missouri. The student pilot was not injured. The airplane received substantial damage to the firewall. Visual meteorological conditions prevailed and no flight plan was filed. The 14 CFR Part 91 solo instructional flight originated at the Creve Coeur Airport, exact time unknown.

The student pilot reported to a Federal Aviation Administration inspector that the airplane bounced during a landing. The student stated he heard a "thump" and he took off again, bringing the airplane around for an uneventful landing.

The accident occurred on the student's third solo instructional flight. Winds reported 7 minutes prior to the accident, at the St. Louis Lambert International Airport, 9 miles east of the accident site were calm.

Inspection of the airplane following the flight, revealed damage to the nose landing gear, propeller, and firewall.

#### **Pilot Information**

Certificate:	Student	Age:	37,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Unknown	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	14 hours (Total, all aircraft), 14 hour	s (Last 90 days, all aircraft)	

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## **Aircraft and Owner/Operator Information**

Aircraft Make:	Zenair	Registration:	N25ZA
Model/Series:	CH 2000 CH 2000	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	20-0025
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1606 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	669 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	0-235
Registered Owner:	ZENITH AIRCRAFT SALES	Rated Power:	116 Horsepower
Operator:	CREVE COEUR AVIATION	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	,605 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	08:53 Local	Direction from Accident Site:	260°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	13°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	(1H0)	Type of Flight Plan Filed:	None
Destination:	(1H0)	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class E

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## **Airport Information**

Airport:	CREVE COEUR 1H0	Runway Surface Type:	Asphalt
Airport Elevation:	447 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	16	IFR Approach:	
Runway Length/Width:	2820 ft / 160 ft	VFR Approach/Landing:	Touch and go

## 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:	38.700916,-90.470878(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Sullivan, Pamela

Additional Participating Persons:

Original Publish Date: November 30, 2000

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=47508

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.

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