



# **Aviation Investigation Final Report**

Location: Forest Lake, Minnesota Accident Number: CEN23LA215

Date & Time: June 1, 2023, 10:03 Local Registration: N827LC

Aircraft: Zenith 750 Aircraft Damage: Substantial

**Defining Event:** Hard landing **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot reported on that he deliberately flew a high approach to land as he had experienced a high sink rate on previous flights. About 1/3 the way down the runway and despite being "ready for it" the pilot experienced a high sink rate as the airplane was about 30 feet off the ground. The airplane impacted the runway and bounced, upon impacting the runway a second time, the airplane remained on the ground, but the pilot reported a "total loss" of rudder control and the aircraft veered off the left side on the runway and came to rest into a ditch. The landing gear collapsed and the forward fuselage was substantially damaged.

The pilot reported that there were no preaccident 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 failure to maintain aircraft control during the approach to land that resulted in an excessive descent rate and impact with the runway.

## Findings

Aircraft	Descent/approach/glide path - Not attained/maintained
AllClaft	Descent, approach, gilde path - Not attained, maintained

Personnel issues Aircraft control - Pilot

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## **Factual Information**

### **History of Flight**

Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Landing gear collapse
Landing-flare/touchdown	Loss of control on ground
Landing-flare/touchdown	Runway excursion

### **Pilot Information**

Certificate:	Private	Age:	58,Male
Airplane Rating(s):	Single-engine land	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:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	September 30, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 15, 2023
Flight Time:	120 hours (Total, all aircraft), 3 hours (Total, this make and model), 105 hours (Pilot In Command, all aircraft), 15.2 hours (Last 90 days, all aircraft), 4.1 hours (Last 30 days, all aircraft), 0.4 hours (Last 24 hours, all aircraft)		

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

Aircraft Make:	Zenith	Registration:	N827LC
Model/Series:	750 SD	Aircraft Category:	Airplane
Year of Manufacture:	2023	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	11167
Landing Gear Type:	Tricycle	Seats:	3
Date/Type of Last Inspection:	April 21, 2023 Condition	Certified Max Gross Wt.:	1900 lbs
Time Since Last Inspection:	3 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3 Hrs at time of accident	Engine Manufacturer:	AEROSPORT
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	IO-375-B2B
Registered Owner:	On file	Rated Power:	180 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:	KANE,912 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	09:50 Local	Direction from Accident Site:	238°
<b>Lowest Cloud Condition:</b>	Few / 15000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	27°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Forest Lake, MN	Type of Flight Plan Filed:	None
Destination:	Forest Lake, MN	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

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# **Airport Information**

Airport:	FOREST LAKE 25D	Runway Surface Type:	Asphalt
Airport Elevation:	929 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	2700 ft / 75 ft	VFR Approach/Landing:	Full stop

### Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	45.247346,-92.992787

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#### **Administrative Information**

Investigator In Charge (IIC):	Brown, Zane
Additional Participating Persons:	Daniel Sindt; FAA FSDO; Minneapolis, MN
Original Publish Date:	September 28, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=192283

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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