Aviation Investigation Final Report

Location:	Lake Elmo, Minnesota	**Accident Number:**	CEN24LA149
Date & Time:	April 5, 2024, 14:54 Local	**Registration:**	N245EM
Aircraft:	Van's Aircraft RV-12iS	**Aircraft Damage:**	Substantial
Defining Event:	Abnormal runway contact	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot was landing the light-sport airplane on the runway when it bounced multiple times. The nose gear collapsed, the propeller struck the ground, and the airplane came to rest upright on the runway in a nose-down attitude. The student pilot was able to exit the airplane without further incident. The airplane sustained substantial damage to the fuselage.

The student pilot reported there were no preimpact mechanical malfunctions or failures with the airframe or the engine that would have precluded normal operation. The student pilot further reported that the accident could have been prevented by initiating a go-around after the first bounce but concluded that his reason for not initiating a go-around, was due to his lack of experience.

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, which resulted in a bounced landing, and the nose gear collapsing. Contributing to the accident was the student pilot's lack of experience.

Findings

Personnel issues	Aircraft control - Student/instructed pilot
Personnel issues	Incorrect action performance - Student/instructed pilot
Personnel issues	Total experience - 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	Part(s) separation from AC
Landing-flare/touchdown	Landing gear collapse
Landing-flare/touchdown	Loss of control on ground
Landing-flare/touchdown	Nose over/nose down
Post-impact	Evacuation

Pilot Information

Certificate:	Student	**Age:**	20,Male
Airplane Rating(s):	None	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	5-point
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Class 1 Without waivers/limitations	**Last FAA Medical Exam:**	August 11, 2023
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	March 31, 2024
Flight Time:	(Estimated) 49 hours (Total, all aircraft), 49 hours (Total, this make and model), 4 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Van's Aircraft	**Registration:**	N245EM
Model/Series:	RV-12iS	**Aircraft Category:**	Airplane
Year of Manufacture:	2020	**Amateur Built:**	
Airworthiness Certificate:	Experimental light sport (Special)	**Serial Number:**	12094
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	March 8, 2024 100 hour	**Certified Max Gross Wt.:**	1320 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	812.6 Hrs as of last inspection	**Engine Manufacturer:**	Rotax Aircraft Engines
ELT:	C91 installed, not activated	**Engine Model/Series:**	912iS
Registered Owner:	TC Asset and Rentals, LLC	**Rated Power:**	100 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None
Operator Does Business As:	None	**Operator Designator Code:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KSTP,711 ft msl	**Distance from Accident Site:**	9 Nautical Miles
Observation Time:	14:53 Local	**Direction from Accident Site:**	247°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots / None	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:		**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30.16 inches Hg	**Temperature/Dew Point:**	14°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lake Elmo, MN	**Type of Flight Plan Filed:**	None
Destination:	Lake Elmo, MN	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class G

Airport Information

Airport:	LAKE ELMO 21D	**Runway Surface Type:**	Asphalt
Airport Elevation:	932 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	14/32	**IFR Approach:**	None
Runway Length/Width:	3500 ft / 75 ft	**VFR Approach/Landing:**	Full stop;Traffic pattern

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:**	44.994257,-92.853946(est)

Administrative Information

Investigator In Charge (IIC):	Hodges, Michael
Additional Participating Persons:	Gregory Thurston; FAA Minneapolis FSDO; Minneapolis, MN
Original Publish Date:	May 9, 2024
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=194048