



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 /	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

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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](#).