



# Aviation Investigation Final Report

<b>Location:</b>	Frederick, Maryland	<b>Accident Number:</b>	ERA22LA245
<b>Date &amp; Time:</b>	May 29, 2022, 09:00 Local	<b>Registration:</b>	N85EX
<b>Aircraft:</b>	Van Lehn Hatz Classic	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Nose over/nose down	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot, who was also the owner and builder of the tailwheel equipped biplane stated that the purpose of the flight was to perform a “final check” of the airplane’s engine and operating systems. The airplane performed “properly,” and he landed “without issue.” The pilot further stated that at low speed during the landing roll, his foot “became lodged between the bulkhead and the brake” which resulted in a sudden misapplication of the brakes and a nose over event, which fractured a wing strut and substantially damaged the airplane.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot’s inadvertent application of the brakes during the landing roll which resulted in a nose over.

## Findings

<b>Aircraft</b>	Surface speed/braking - Incorrect use/operation
<b>Personnel issues</b>	Aircraft control - Pilot

## Factual Information

### History of Flight

<b>Landing-landing roll</b>	Nose over/nose down (Defining event)
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### Pilot Information

<b>Certificate:</b>	Airline transport; Commercial; Flight instructor	<b>Age:</b>	65, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	November 18, 2021
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	28000 hours (Total, all aircraft), 1.5 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Van Lehn	<b>Registration:</b>	N85EX
<b>Model/Series:</b>	Hatz Classic NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2022	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	194
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	May 15, 2022 Condition	<b>Certified Max Gross Wt.:</b>	1700 lbs
<b>Time Since Last Inspection:</b>	1.5 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1.5 Hrs at time of accident	<b>Engine Manufacturer:</b>	Rotec
<b>ELT:</b>		<b>Engine Model/Series:</b>	R3800
<b>Registered Owner:</b>	VAN LEHN RICHARD GLENN	<b>Rated Power:</b>	150
<b>Operator:</b>	VAN LEHN RICHARD GLENN	<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>	Day
<b>Observation Facility, Elevation:</b>	KFDK,303 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	07:47 Local	<b>Direction from Accident Site:</b>	265°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.09 inches Hg	<b>Temperature/Dew Point:</b>	17°C / 16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Frederick, MD	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Frederick, MD	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	FREDERICK MUNI FDK	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	306 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	23	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5819 ft / 100 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	39.417568,-77.374297

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Rayner, Brian
<b>Additional Participating Persons:</b>	Steve O'Rourke; FAA FSDO; Baltimore
<b>Original Publish Date:</b>	April 20, 2023
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=105148">https://data.nts.gov/Docket?ProjectID=105148</a>

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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](#).