



Aviation Investigation Final Report

Location:	Oshkosh, Wisconsin	Accident Number:	CEN23LA323
Date & Time:	July 20, 2023, 18:45 Local	Registration:	N917CM
Aircraft:	Vans RV-10	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, he was landing on runway 27 at or beyond the green dot. The pilot reduced engine power after he reached the green dot. The airplane impacted the runway hard and both main landing gear collapsed. The airplane sustained substantial damage to the fuselage. The pilot stated 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 improper landing flare which resulted in a hard landing.

Findings

Aircraft	Landing flare - Not attained/maintained
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Landing gear collapse

Pilot Information

Certificate:	Private	Age:	66,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	January 5, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 20, 2023
Flight Time:	728 hours (Total, all aircraft), 114 hours (Total, this make and model), 630 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Vans	Registration:	N917CM
Model/Series:	RV-10	Aircraft Category:	Airplane
Year of Manufacture:	2022	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	41171
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 7, 2023 Condition	Certified Max Gross Wt.:	2700 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	109.4 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	IO-540-C4B5
Registered Owner:	On file	Rated Power:	250
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:	KOSH, 808 ft msl	Distance from Accident Site:	
Observation Time:	18:00 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	25°C / 14.4°C
Precipitation and Obscuration:			
Departure Point:	DeKalb, IL (KDKB)	Type of Flight Plan Filed:	None
Destination:	Oshkosh, WI (KOSH)	Type of Clearance:	VFR
Departure Time:	17:31 Local	Type of Airspace:	Class D

Airport Information

Airport:	Wittman Regional Airport KOSH	Runway Surface Type:	
Airport Elevation:	808 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	6179 ft / 150 ft	VFR Approach/Landing:	Full stop; Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	43.984371, -88.557043(est)

Administrative Information

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	Peter Hupfer; FAA FSDO; Milwaukee, WI
Original Publish Date:	February 8, 2024
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=192707

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](#).