



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Salem, Wisconsin	Accident Number:	CEN23LA229
Date & Time:	June 5, 2023, 18:00 Local	Registration:	N42220
Aircraft:	Piper J3C-65	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that she landed hard on the left main landing gear, which resulted in the landing gear collapse. The left wing contacted the ground, and the airplane spun 180°. A post-accident inspection revealed that there was substantial damage to the left wing. The pilot reported there were no mechanical malfunctions or failures 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 and the left main landing gear collapse.

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:	Sport Pilot	Age:	60,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
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:	August 1, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	391 hours (Total, all aircraft), 391 hours (Total, this make and model), 352 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N42220
Model/Series:	J3C-65	Aircraft Category:	Airplane
Year of Manufacture:	1945	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	14470
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	April 12, 2023 Annual	Certified Max Gross Wt.:	1220 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2930 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	C-85-12F
Registered Owner:	On file	Rated Power:	85
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:	KMKE, 667 ft msl	Distance from Accident Site:	24 Nautical Miles
Observation Time:	17:52 Local	Direction from Accident Site:	28°
Lowest Cloud Condition:	Few / 1800 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	24°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	East Troy, WI (57C)	Type of Flight Plan Filed:	None
Destination:	East Troy, WI (57C)	Type of Clearance:	None
Departure Time:	17:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Private PVT	Runway Surface Type:	
Airport Elevation:	741 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	42.61,-88.16

Administrative Information

Investigator In Charge (IIC):	Abraham, Laura
Additional Participating Persons:	Michael Brockel; FAA; Milwaukee , WI
Original Publish Date:	August 31, 2023
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=192321

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](#).