



Aviation Investigation Final Report

Location:	Terre Haute, Indiana	Accident Number:	CEN22LA184
Date & Time:	April 27, 2022, 13:25 Local	Registration:	N73T
Aircraft:	Piper PA-24-260	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that the baggage door opened shortly after takeoff, so he decided to return for a landing. The landing gear circuit breaker tripped when he attempted to extend the landing gear on downwind. After resetting the circuit breaker, the landing gear extended normally, and the gear down light illuminated. Upon landing, the right main landing gear collapsed, and the airplane sustained substantial damage to the right wing.

An examination of the landing gear determined the outer bearing brace failed which allowed the landing gear strut to separate from the trunnion. Examination of the fracture surface revealed that the bearing failed as a result of overload. The overload failure of the landing gear bearing was consistent with a hard landing.

Probable Cause and Findings

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

A hard landing, which resulted in the failure of the right main landing gear outer bearing and collapse of the landing gear.

Findings

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

Factual Information

History of Flight

Landing	Hard landing (Defining event)
Landing-landing roll	Landing gear collapse

On April 27, 2022, about 1325 eastern daylight time, a Piper PA-24-260 airplane, N73T, was substantially damaged when it was involved in an accident near Terre Haute, Indiana. The pilot and passenger were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot stated that shortly after departure the baggage door opened. He decided to return to land. On downwind, the landing gear in transit light remained illuminated and the circuit breaker tripped, after he selected the landing gear lever to the down position. The pilot reset the circuit breaker, recycled the landing gear, and the landing gear down light illuminated. Upon landing, the right main landing gear collapsed, and the airplane sustained substantial damage to the right wing.

An on-scene examination by a Federal Aviation Administration inspector determined that the spherical bearing common to the right main landing gear forward trunnion fitting had failed. The outer bearing race failed and allowed the landing gear strut to separate from the trunnion. Examination of the fracture surface revealed signatures consistent with overstress. No evidence of corrosion or fatigue was observed.

Pilot Information

Certificate:	Airline transport	Age:	57, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	September 22, 2021
Occupational Pilot:		Last Flight Review or Equivalent:	May 21, 2021
Flight Time:	(Estimated) 4367 hours (Total, all aircraft), 1217 hours (Total, this make and model), 4242 hours (Pilot In Command, all aircraft), 45 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N73T
Model/Series:	PA-24-260	Aircraft Category:	Airplane
Year of Manufacture:	1971	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-4991
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	March 23, 2022 Annual	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5427 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	IO-540-N1A5
Registered Owner:	LUCID THOUGHT CONSULTING LLC	Rated Power:	260 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None
Operator Does Business As:	N/A	Operator Designator Code:	N/A

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KHUF, 57 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	13:53 Local	Direction from Accident Site:	167°
Lowest Cloud Condition:	Clear	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.21 inches Hg	Temperature/Dew Point:	19°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Terre Haute, IN (HUF)	Type of Flight Plan Filed:	None
Destination:	Terre Haute, IN (HUF)	Type of Clearance:	VFR
Departure Time:	13:25 Local	Type of Airspace:	Class D

Airport Information

Airport:	Terre Haute Regional Airport HUF	Runway Surface Type:	Asphalt
Airport Elevation:	589 ft msl	Runway Surface Condition:	Dry
Runway Used:	23	IFR Approach:	Visual
Runway Length/Width:	9021 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:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.456236,-87.3018(est)

Administrative Information

Investigator In Charge (IIC):	Teilhaber, Ryan
Additional Participating Persons:	Andrew Strader; FAA
Original Publish Date:	October 13, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=105012

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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](#).