



Aviation Investigation Final Report

Location:	Kapolei, Hawaii	Accident Number:	ANC24LA010
Date & Time:	December 11, 2023, 14:00 Local	Registration:	N172CN
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The first pilot, seated in the left seat, and the second pilot, seated in the right seat, both flight instructors, reported that the purpose of the flight was to accumulate additional flight time and practice various flight maneuvers.

The first pilot reported that while she was performing a simulated, power-off, 180° landing to Runway 4L, adjacent to a large military airplane operating in the traffic pattern of a parallel runway, the accident airplane began a rapid descent while on short final. To arrest the rapid descent, the first pilot said she initiated a go-around by applying full engine power, but the rapid descent continued, and the airplane touched down hard before becoming airborne again.

Airport wind conditions at the time of the accident were reported to be, 120°, at 10 knots, with peak gusts to 17 knots, which translates to a quartering, right tailwind.

The second pilot reported that, prior to the accident sequence, as the approach to Runway 4L continued, the first pilot decided to lower the nose to gain airspeed and enter ground effect. The second pilot stated that, as the airplane passed through 75 to 50 ft above the runway, the airplane encountered an unusual sink rate, and he reacted by pulling back on the yoke as he yelled “flare” just before the airplane touched down hard. The second pilot reported that the airplane subsequently touched down hard, bounced back into the air, and the first pilot then initiated a go-around.

After establishing a climb on the go-around, the first pilot transferred control to the second pilot, who subsequently performed a precautionary full-stop landing to check for damage. During the landing roll, the nose wheel deflated, and the airplane came to a stop on the runway, disabled.

A post-flight inspection revealed that the airplane sustained substantial damage to the firewall and fuselage. The pilots reported that there were no pre-accident mechanical failures or malfunctions 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 first pilot’s failure to maintain a stabilized approach, in gusty crosswind conditions, in an environment favoring wake turbulence.

Findings	
Aircraft	Descent/approach/glide path - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Crosswind - Contributed to outcome

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
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Pilot Information

Certificate:	Commercial; Flight instructor; Private	Age:	20,Female
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:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	February 17, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 25, 2023
Flight Time:	1022 hours (Total, all aircraft), 885 hours (Total, this make and model), 949 hours (Pilot In Command, all aircraft), 425 hours (Last 90 days, all aircraft), 89 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	19,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	August 9, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 26, 2023
Flight Time:	542 hours (Total, all aircraft), 466 hours (Total, this make and model), 470 hours (Pilot In Command, all aircraft), 72 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N172CN
Model/Series:	172	Aircraft Category:	Airplane
Year of Manufacture:	2020	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	172S12458
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	November 19, 2023 100 hour	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	90.1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2627.1 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:	GALVIN FLIGHT SERVICES HAWAII LLC	Rated Power:	180
Operator:	On file	Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PHJR,10 ft msl	Distance from Accident Site:	
Observation Time:	13:59 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 17 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.99 inches Hg	Temperature/Dew Point:	29°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Honolulu, HI (PHNL)	Type of Flight Plan Filed:	None
Destination:	Kapolei, HI	Type of Clearance:	VFR
Departure Time:	13:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	Kalaeloa Airport - John Rodgers Field PHJR	Runway Surface Type:	Asphalt
Airport Elevation:	30 ft msl	Runway Surface Condition:	Dry
Runway Used:	4L	IFR Approach:	None
Runway Length/Width:	4500 ft / 200 ft	VFR Approach/Landing:	Touch and go;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	21.3103,-158.0713(est)

Administrative Information

Investigator In Charge (IIC):	Rasmussen, Mitchell
Additional Participating Persons:	Joewie Maldonado; FAA FSDO Honolulu; Honolulu, HI
Original Publish Date:	June 28, 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=193574

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](#).