



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Lawrenceville, Georgia	Accident Number:	GAA19CA020
Date & Time:	October 14, 2018, 12:30 Local	Registration:	N996SB
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that the student pilot approached the runway with too shallow of an angle. The student applied forward pressure on the yoke, and the airplane's nose pitched down. The instructor recalled that the student's pitch application was excessive, and he called for a transfer of the flight controls. However, the student remained on the controls, and the instructor had to overpower the student's control inputs while the airplane was in a 45° nose-down attitude. The airplane landed hard in a level attitude, and the nose landing gear collapsed. A fire erupted in the cabin, and the instructor used the fire extinguisher to attempt to extinguish the fire. Subsequently, the airplane slid to a stop on the runway, and both occupants exited; the fire consumed the cabin.

The airplane sustained substantial damage to the cabin and wings.

The instructor reported that there were no 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 student pilot's improper pitch application, which resulted in a hard landing and subsequent fire. Contributing to the accident was the student's failure to give over the flight controls to the flight instructor when instructed to do so.

Findings

Aircraft	Pitch control - Incorrect use/operation
Personnel issues	Use of equip/system - Student/instructed pilot
Personnel issues	Lack of action - Student/instructed pilot

Factual Information

History of Flight

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

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	74, Male
Airplane Rating(s):	Single-engine land; 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:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	May 1, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 2, 2017
Flight Time:	(Estimated) 3006 hours (Total, all aircraft), 654 hours (Total, this make and model), 2955 hours (Pilot In Command, all aircraft), 53 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	None	Age:	26, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 4 hours (Total, all aircraft), 4 hours (Total, this make and model), 4 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N996SB
Model/Series:	172 K	Aircraft Category:	Airplane
Year of Manufacture:	1969	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17258251
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	October 4, 2018 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	10896 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A4M
Registered Owner:		Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLZU, 1061 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	16:48 Local	Direction from Accident Site:	348°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	21°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Atlanta, GA (PDK)	Type of Flight Plan Filed:	None
Destination:	Atlanta, GA (PDK)	Type of Clearance:	VFR
Departure Time:	11:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	Gwinnett County - Briscoe Fiel LZU	Runway Surface Type:	Asphalt
Airport Elevation:	1061 ft msl	Runway Surface Condition:	Dry
Runway Used:	07	IFR Approach:	None
Runway Length/Width:	6000 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	33.978054,-83.962501(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Jim Payne; FAA; Atlanta, GA
Original Publish Date:	September 26, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98485

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).