

Aviation Investigation Final Report

Location: Greeley, Colorado Accident Number: CEN18CA323

Date & Time: August 8, 2018, 20:00 Local Registration: N20JA

Aircraft: Cessna 172 Aircraft Damage: Substantial

Defining Event: Loss of control in flight **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot and a safety pilot were practicing instrument maneuvers, approaches, and landings at different airports during the flight. The airplane entered the traffic pattern for a practice landing at an airport. According to the safety pilot, the airplane was high and slow during the final approach. About 10 ft above ground level, the airplane "floated a little longer," and the pilot initiated a go-around by applying full throttle. During the attempted go-around, both occupants applied conflicting "correction" inputs to the control yokes; the pilot applied back pressure, and the safety pilot applied forward pressure. The airplane stalled, the left wing impacted terrain, and the airplane came to rest upright adjacent to the runway.

The airplane sustained substantial damage to the forward fuselage and both wings.

Both pilots reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The pilot statements were conflicting regarding the accident details and sequence of events. Based on the statements and airplane damage, it is likely that the conflicting control inputs resulted in the pilots' failure to maintain a proper airspeed and that the airplane entered an aerodynamic stall during the attempted go-around. Neither pilot reported that verbal communication was established during the landing sequence.

Probable Cause and Findings

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

The pilot's and safety pilot's conflicting control inputs during landing, which resulted in their failure to maintain a proper airspeed and resulted in an aerodynamic stall. Contributing to the accident was the lack of communication between the pilot and safety pilot during the landing and go-around.

Findings

Personnel issues	Lack of communication - Flight crew
Personnel issues	Lack of communication - Pilot
Aircraft	Airspeed - Not attained/maintained
Personnel issues	Use of equip/system - Pilot
Personnel issues	Use of equip/system - Other
Personnel issues	Lack of communication - Other
Personnel issues	Use of equip/system - Pilot Use of equip/system - Other

Page 2 of 5 CEN18CA323

Factual Information

History of Flight

Approach	Miscellaneous/other
Approach-VFR go-around	Loss of control in flight (Defining event)
Approach	Attempted remediation/recovery
Approach-VFR go-around	Aerodynamic stall/spin
Approach-VFR go-around	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	25,Female
Airplane Rating(s):	Single-engine land	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:	Class 1 With waivers/limitations	Last FAA Medical Exam:	July 3, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	December 3, 2017
Flight Time:	164 hours (Total, all aircraft), 161 hours (Total, this make and model), 114 hours (Pilot In Command, all aircraft), 67 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Pilot-rated passenger Information

Certificate:	Private	Age:	21,Male
Airplane Rating(s):	Single-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):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	December 22, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 16, 2017
Flight Time:	240 hours (Total, all aircraft), 207 hours (Total, this make and model), 197 hours (Pilot In Command, all aircraft), 64 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Page 3 of 5 CEN18CA323

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N20JA
Model/Series:	172 R	Aircraft Category:	Airplane
Year of Manufacture:	1997	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17280253
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	June 30, 2018 100 hour	Certified Max Gross Wt.:	2299 lbs
Time Since Last Inspection:	46 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	8765.4 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:		Rated Power:	180 Horsepower
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:	GXY,4696 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	19:45 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	24°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fort Morgan, CO (FMM)	Type of Flight Plan Filed:	None
Destination:	Greeley, CO (GXY)	Type of Clearance:	None
Departure Time:	19:30 Local	Type of Airspace:	Class G

Page 4 of 5 CEN18CA323

Airport Information

Airport:	Greeley-Weld County Airport GXY	Runway Surface Type:	Asphalt
Airport Elevation:	4696 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	10000 ft / 100 ft	VFR Approach/Landing:	Go around;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:	40.428611,-104.631942(est)

Administrative Information

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	John Childers; FAA ; Denver, CO
Original Publish Date:	March 18, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=98025

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.

Page 5 of 5 CEN18CA323