



Aviation Investigation Final Report

Location:	Peyton, Colorado	Accident Number:	CEN20LA365
Date & Time:	August 26, 2020, 11:37 Local	Registration:	N64EM
Aircraft:	Cessna T210	Aircraft Damage:	Destroyed
Defining Event:	Loss of control in flight	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was returning to the airport in and entered the airplane into the traffic pattern between two airplanes that flew slower. The flight instructor in the leading airplane stated that there was not much separation between the airplanes, and the pilot in the trailing airplane noted that the leading airplane appeared to be significantly slower than the accident airplane. The pilot in the trailing airplane stated that the accident airplane flew an extended downwind leg and that, while the accident airplane was turning final, it overshot the runway, increased its bank, and pitched up slightly. The pilot in the trailing airplane stated the accident pilot made all “proper” radio calls, including for the final turn, without any mention of malfunctions. A witness on the ground saw the airplane’s wings “wobble”; he estimated the airplane was about 30 to 50 ft above the ground when it nosed down, then stalled, dropped “straight” in, and impacted terrain. He also stated that he did not hear any engine sounds.

The trailing pilot’s account of the events was consistent with a video playback of radar data.

No preimpact anomalies were found during postaccident examinations of the airframe and engine that would have precluded normal operation of the airplane, and the airplane had sufficient fuel onboard. Thus, it is likely that the pilot entered the traffic pattern behind a slower airplane, and, in an attempt to add more space between his airplane and the one ahead, he reduced the speed and increased airplane pitch to the point where it exceeded critical angle of attack, which resulted in an aerodynamic stall as he turned onto the final leg of the traffic pattern.

Probable Cause and Findings

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

The pilot’s failure to maintain adequate airspeed and the exceedance of the airplane’s critical angle of attack during the airplane’s turn to final, resulting in an aerodynamic stall.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Airspeed - Not attained/maintained
Aircraft	Angle of attack - Not attained/maintained

Factual Information

History of Flight

Approach-VFR pattern final	Loss of control in flight (Defining event)
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On August 26, 2020, about 1137 mountain daylight time, a Cessna T210N airplane, N64EM, was destroyed when it was involved in an accident near Peyton, Colorado. The pilot sustained fatal injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

About 1011, the pilot departed from Meadow Lake Airport (FLY), Colorado Springs, Colorado, for the City of Colorado Springs Municipal Airport (COS), Colorado Springs, Colorado, to have the airplane's oxygen system serviced. About 1125, the airplane departed COS on a return flight to FLY.

A flight instructor who was providing instruction to a student pilot in a Cessna 150 airplane in the pattern at FLY stated that the accident airplane got in between the airplane he was in and another Cessna 150 airplane, which was trailing, for a landing on runway 33. The instructor felt that there was not much separation between the airplanes. The student pilot and instructor turned their airplane from the base leg onto final. The instructor thought the accident airplane had extended its downwind to make some room between the airplanes and also that the accident airplane slowed to make room because it was faster. The instructor indicated that the winds were blowing from east to west. After the student pilot and instructor landed their airplane, they heard that the accident airplane had crashed south of the runway.

The pilot in the trailing Cessna 150 airplane stated that the accident airplane entered on the downwind between his airplane and the other Cessna 150 airplane, which appeared to be significantly slower than the accident airplane. He stated that the accident airplane flew an extended downwind leg and that, while the accident airplane was turning final, it overshot the runway, increased its bank, and pitched up slightly. The airplane then impacted terrain and nosed over. The pilot observed a "puff" of white smoke, a "huge fire ball," and black smoke. The pilot said that the accident pilot had made all "proper" radio calls, including the final turn.

The trailing pilot's account of the events was consistent with a video playback of radar data.

A witness near the accident site said he saw the accident airplane's wings "wiggle" and that he thought that the airplane was going to crash. He estimated the airplane was about 30 to 50 ft above the ground when it nosed down, stalled, and dropped "straight" in, impacting terrain. He also stated that he did not hear any engine sounds. There was no fire or smoke from the airplane when it was in the air. The nose landing gear separated on impact, and the airplane slid on the ground and subsequently caught on fire.

Pilot Information

Certificate:	Private	Age:	46, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	December 2, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 207 hours (Total, all aircraft)		

The pilot was given a notice of disapproval after his initial attempt at a private pilot examination. According to a flight instructor who subsequently endorsed the pilot's private pilot retest, the pilot's areas of deficiency were soft field takeoffs and short field landings. The instructor gave the pilot four additional instructional flights totaling 8.1 hours of flight time. The pilot satisfactorily passed the retesting for his private pilot certificate on October 21, 2016.

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N64EM
Model/Series:	T210 N	Aircraft Category:	Airplane
Year of Manufacture:	1978	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	21063032
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	TSIO-520-R
Registered Owner:	On file	Rated Power:	310
Operator:	On file	Operating Certificate(s) Held:	None

According to a mechanic who performed maintenance on the accident airplane, the engine exhibited low cylinder compression readings during an annual inspection on October 1, 2019, and the cylinders were replaced. The mechanic subsequently flew in the airplane for about 25 minutes with the pilot to “seat the new rings.” He reported that the pilot used a checklist for the takeoff and that the takeoff and landing were “normal.” However, he did advise the pilot to use flaps.

A fuel service receipt showed the accident airplane was fueled on the day of the accident about 0945 with 53.34 gallons of 100 low-lead aviation gasoline. The airplane was equipped with two 45-gallon fuel tanks, which had a total capacity of 90 gallons, of which 89 gallons was usable.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KFLY, 6877 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	11:35 Local	Direction from Accident Site:	340°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 16 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	31°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Colorado Springs, CO (COS)	Type of Flight Plan Filed:	None
Destination:	Peyton, CO (FLY)	Type of Clearance:	None
Departure Time:	11:25 Local	Type of Airspace:	Class G

Airport Information

Airport:	MEADOW LAKE FLY	Runway Surface Type:	Asphalt
Airport Elevation:	6877 ft msl	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	6000 ft / 60 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	38.920276,-104.55805(est)

The wreckage was located about 1 mile southeast of runway 33. The left wing, left elevator, and sections of the fuselage were melted, deformed, and discolored consistent with ground fire. The outboard section of the right wing did not exhibit the same extent of thermal deformation and discoloration as the left wing. The fuel tank selector was found selecting the right tank. The

propeller hub remained attached to the engine. The propeller blade that remained attached to the hub exhibited melting, deformation, and discoloration. Two propeller blades had separated from the propeller hub, and outboard sections of those blades exhibited chordwise abrasion. The flap jack screw extension was consistent with retracted flaps.

Subsequent airframe and engine examinations were conducted. No preimpact anomalies were found that would have prevented normal operation of the airplane.

Medical and Pathological Information

An autopsy was performed on the pilot by the El Paso County Coroner and toxicological samples were taken. The cause of death was multiple blunt force injuries. Ibuprofen (Motrin) was detected on the autopsy toxicology and is not disqualifying for Federal Aviation Administration (FAA) medical certification. FAA toxicology did not detect ethanol, drugs of abuse, or carboxyhemoglobin.

Administrative Information

Investigator In Charge (IIC):	Malinowski, Edward
Additional Participating Persons:	Bret Proud; Federal Aviation Administration; Denver, CO Andrew Hall; Textron Aviation; Wichita, KS Kevin Stahl; McCauley Propellers; Wichita, KS Kurt Gibson; Continental Motors; Mobile, AL
Original Publish Date:	May 5, 2021
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=101867

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](#).