



Aviation Investigation Final Report

Location:	Belen, New Mexico	Accident Number:	GAA16CA412
Date & Time:	August 3, 2016, 07:45 Local	Registration:	N72580
Aircraft:	Cessna 120	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The tailwheel endorsed pilot reported that he was practicing stop and go landing's in a make and model tailwheel-equipped airplane that he had never flown before. During the fourth stop and go, the pilot reported that during the landing roll at 35 miles per hour the airplane began to turn to the right and he attempted to correct. Subsequently, the airplane continued to the right, departed the runway, and ground looped. During the ground loop, the left main landing gear collapsed and the left wing was substantially damaged after the impact with terrain.

The pilot did not report any 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 pilot's failure to maintain directional control during the landing roll, which resulted in a runway excursion and a ground loop.

Findings	
Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	(general) - Contributed to outcome

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)	
Landing-landing roll	Runway excursion	
Landing-landing roll	Landing gear collapse	
Landing-landing roll	Collision with terr/obj (non-CFIT)	

Pilot Information

Certificate:	Airline transport	Age:	72,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	January 4, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 25, 2016
Flight Time:	(Estimated) 13000 hours (Total, all aircraft), 1 hours (Total, this make and model), 8000 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N72580
Model/Series:	120 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	1946	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	9750
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	March 19, 2016 Annual	Certified Max Gross Wt.:	1450 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4352.8 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	C91 installed, not activated	Engine Model/Series:	0-200A
Registered Owner:	On file	Rated Power:	85 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:	E80,5199 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	13:55 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.26 inches Hg	Temperature/Dew Point:	21°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LOS LUNAS, NM (E98)	Type of Flight Plan Filed:	None
Destination:	BELEN, NM (E80)	Type of Clearance:	None
Departure Time:	07:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	ALEXANDER MUNI E80	Runway Surface Type:	Asphalt
Airport Elevation:	5199 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	6601 ft / 60 ft	VFR Approach/Landing:	Stop and go;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	34.650833,-106.826942(est)

Preventing Similar Accidents

Understanding Flight Experience (SA-040)

The Problem

Aircraft have different flight characteristics, performance, and systems. Pilots may have many hours of experience, but their experience specific to the aircraft make/model and/or equipment they are flying may be limited.

Although Federal Aviation Administration (FAA) regulations allow pilots to operate aircraft that are designated by a specific category and class, differences among different types of aircraft within the same category and class can be significant. Even if operating a specific type of aircraft is allowed by regulations, it does not mean the practice is safe.

What can you do?

- Obtain the necessary training from a flight instructor experienced in the aircraft that you plan to fly so that you understand the flight characteristics and emergency procedures for that aircraft. Meeting the minimum requirements does not mean that you are proficient.
- Obtain refresher training if you have not flown for a long period; long periods of no flying, even for high-time pilots, can have an adverse impact on your ability to respond to unusual situations and emergencies.
- Seek out a qualified test pilot to assist in flight testing homebuilt aircraft you are not familiar with.
- Seek out instruction for advanced avionics and systems. Identical make-and-model aircraft can have considerably different cockpit panels.

See <u>https://www.ntsb.gov/Advocacy/safety-alerts/Documents/SA-040.pdf</u> for additional resources.

The NTSB presents this information to prevent recurrence of similar accidents. Note that this should not be considered guidance from the regulator, nor does this supersede existing FAA Regulations (FARs).

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Dave Jones; FAA; Albuquerque, NM
Original Publish Date:	September 22, 2016
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=93753

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.