



# **Aviation Investigation Final Report**

Location: Harlan, Iowa Accident Number: CEN18CA185

**Date & Time:** May 16, 2018, 09:45 Local **Registration:** N77273

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 pilot flew a visual approach to a 1,712-ft-long by 120-ft-wide turf runway. During touchdown, the airplane bounced and the pilot "felt out of control." The pilot executed a late go-around, during which the airplane struck a fence at the end of the airport property. Then, due to approaching trees, the pilot attempted to make a turn, which resulted in an aerodynamic stall. The airplane subsequently impacted terrain and came to rest inverted, which damaged the tail.

### **Probable Cause and Findings**

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

The pilot's late go-around during a bounced landing, which led to an aerodynamic stall and impact with terrain.

Airspeed - Not attained/maintained

#### **Findings**

**Aircraft** 

Personnel issues Aircraft control - Pilot

 Personnel issues
 Decision making/judgment - Pilot

 Environmental issues
 Tree(s) - Contributed to outcome

Page 2 of 5 CEN18CA185

## **Factual Information**

## History of Flight

Landing	Abnormal runway contact	
Landing	Loss of control on ground (Defining event)	
Approach-VFR go-around	Loss of control in flight	
Approach-VFR go-around	Aerodynamic stall/spin	
Uncontrolled descent	Collision with terr/obj (non-CFIT)	

### **Pilot Information**

Certificate:	Private	Age:	23,Male
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:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	May 3, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 3, 2016
Flight Time:	281 hours (Total, all aircraft), 29 hours (Total, this make and model), 178 hours (Pilot In Command, all aircraft)		

Page 3 of 5 CEN18CA185

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N77273
Model/Series:	120 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	1946	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	11486
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 27, 2017 Annual	Certified Max Gross Wt.:	1451 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3203 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	C85 SERIES
Registered Owner:		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:	KHNR,1231 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	09:55 Local	Direction from Accident Site:	211°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	22°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Atlantic, IA (AIO)	Type of Flight Plan Filed:	None
Destination:	Harlan, IA (HNR)	Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	Class E

Page 4 of 5 CEN18CA185

#### **Airport Information**

Airport:	Harlan Muni HNR	Runway Surface Type:	Grass/turf
Airport Elevation:	1231 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	03	IFR Approach:	None
Runway Length/Width:	1712 ft / 120 ft	VFR Approach/Landing:	Full stop;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:	41.586944,-95.336669(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Folkerts, Michael
Additional Participating Persons:	John Walberg; Flight Standards District Office; Des Moines, IA
Original Publish Date:	September 10, 2018
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97299

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 CEN18CA185