



Aviation Investigation Final Report

Location:	Carbondale, Illinois	Accident Number:	CEN20CA192
Date & Time:	May 22, 2020, 11:23 Local	Registration:	N5183X
Aircraft:	Champion 7GCBC	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that the accident occurred during a wheel landing in the tailwheel-equipped airplane on a hard surface runway. The pilot stated that upon touchdown the airplane began to swerve side-to-side due to the airplane's "natural instability" on the ground. The pilot attempted to maintain directional control by pulling full aft on the control stick and applying maximum braking; however, his excessive brake input while the airplane was in a level pitch attitude caused the airplane to pitch down and the propeller to impact the runway before the airplane pivoted back onto the tailwheel. The airplane came to rest upright on the runway. The tailwheel crushed the lower portion of the rudder when it landed hard on the runway. The pilot reported that there were no mechanical anomalies with the airplane that would have precluded normal operation. A postaccident examination confirmed flight control continuity and found no issues with the wheel brakes or the tailwheel.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's excessive brake input while he attempted to maintain directional control during landing roll.

Findings

Aircraft	Brake - Incorrect use/operation
Aircraft	Surface speed/braking - Incorrect use/operation
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Nose over/nose down
Landing-landing roll	Abnormal runway contact

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	24, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	Glider	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Glider	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	June 7, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 7, 2018
Flight Time:	462 hours (Total, all aircraft), 84 hours (Total, this make and model), 349 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Champion	Registration:	N5183X
Model/Series:	7GCBC No Series	Aircraft Category:	Airplane
Year of Manufacture:	1969	Amateur Built:	
Airworthiness Certificate:	Aerobatic; Normal	Serial Number:	170
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 6, 2019 Annual	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:	98 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2035 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	O-320-A2B
Registered Owner:	On file	Rated Power:	160 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:	MDH,411 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	11:32 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 3200 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.96 inches Hg	Temperature/Dew Point:	24°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Carbondale, IL (MDH)	Type of Flight Plan Filed:	None
Destination:	Carbondale, IL (MDH)	Type of Clearance:	VFR
Departure Time:	10:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	Southern Illinois Airport MDH	Runway Surface Type:	Asphalt
Airport Elevation:	411 ft msl	Runway Surface Condition:	Dry
Runway Used:	18R	IFR Approach:	None
Runway Length/Width:	3498 ft / 60 ft	VFR Approach/Landing:	Full stop;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:	37.778057,-89.251945(est)

Administrative Information

Investigator In Charge (IIC):	Fox, Andrew
Additional Participating Persons:	Michael P Veselka; Federal Aviation Administration, Springfield FSDO; Springfield, IL
Original Publish Date:	May 5, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=101325

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