



Aviation Investigation Final Report

Location:	Davenport, Iowa	Accident Number:	CEN20CA253
Date & Time:	June 27, 2020, 09:11 Local	Registration:	N18873
Aircraft:	Beech 23	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	2 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was taking off and had begun to climb out when, the airplane's critical angle of attack was exceeded, an aerodynamic stall occurred, and the airplane impacted terrain. The airplane sustained substantial damage to the fuselage. A postaccident examination of the airframe by Federal Aviation Administration aviation safety inspectors found the trim was configured in a nose up setting for a landing profile. The pilot reported there were no preimpact mechanical malfunctions or failures with the airframe and engine 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 properly configure the airplane for takeoff, which resulted in the exceedance of the airplane's critical angle of attack, an aerodynamic stall, and subsequent impact with terrain.

Findings

Personnel issues	Preflight inspection - Pilot
Personnel issues	Aircraft control - Pilot
Aircraft	Elevator control system - Inadequate inspection
Aircraft	Angle of attack - Capability exceeded

Factual Information

History of Flight

Prior to flight	Preflight or dispatch event
Takeoff	Loss of control in flight
Takeoff	Aerodynamic stall/spin (Defining event)
Takeoff	Collision during takeoff/land

Pilot Information

Certificate:	Private	Age:	51, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	None
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	June 18, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 20, 2020
Flight Time:	145 hours (Total, all aircraft), 61 hours (Total, this make and model), 32 hours (Pilot In Command, all aircraft), 45 hours (Last 90 days, all aircraft), 34 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N18873
Model/Series:	23 C23	Aircraft Category:	Airplane
Year of Manufacture:	1977	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	M-1959
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	May 5, 2020 Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3426 Hrs at time of accident	Engine Manufacturer:	Lycoming Engines
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A4K
Registered Owner:	On file	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:	KDVN,750 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	13:52 Local	Direction from Accident Site:	307°
Lowest Cloud Condition:	Scattered / 8500 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.86 inches Hg	Temperature/Dew Point:	24°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Davenport, IA (DVN)	Type of Flight Plan Filed:	None
Destination:	Baraboo, WI (DLL)	Type of Clearance:	None
Departure Time:	09:11 Local	Type of Airspace:	Class E

Airport Information

Airport:	Davenport Muni DVN	Runway Surface Type:	Concrete
Airport Elevation:	750 ft msl	Runway Surface Condition:	Dry
Runway Used:	03	IFR Approach:	None
Runway Length/Width:	4001 ft / 100 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor, 1 None	Latitude, Longitude:	41.612499,-90.588333(est)

Administrative Information

Investigator In Charge (IIC):	Hodges, Michael
Additional Participating Persons:	Michael Newhall; FAA Des Moines FSDO; Ankeny, IA
Original Publish Date:	May 6, 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=101509

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](#).