



National Transportation Safety Board Aviation Accident Final Report

Location:	Denton, MT	Accident Number:	GAA16CA319
Date & Time:	06/12/2016, 0750 MDT	Registration:	N5720L
Aircraft:	AMERICAN AA 1	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 during the takeoff roll from a soft field turf runway, "I was not as aggressive as he should have been." He reported that the airspeed increased, the airplane began to rotate, but without enough airspeed to sustain climbing flight. He reported that he "pushed the nose over", the airplane settled to the runway and bounced. The airplane overran the end of the runway, struck a fence and sustained substantial damage to both wings.

The pilot reported that there were no mechanical failures or anomalies with airframe, flight controls or the engine that would have prevented normal flight operations.

According to the manufacturer pilot operating handbook, for Soft-Field Take-off:

Hold full back pressure as you taxi and as the takeoff roll is begun. If the surface is marginal or too narrow for gradual turn on to the runway, align the airplane with the runway, apply full brakes, and build up takeoff RPM before starting the takeoff roll. As you apply full power, move the control wheel to neutral and allow the airplane to accelerate to 65-70 MPH. Lift off with a light back pressure. After lift-off release enough of this back pressure to permit the airplane to accelerate to its best angle- or rate of climb speed as required by obstructions.

Probable Cause and Findings

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

The pilot's premature rotation and failure to attain sufficient airspeed required for a sustained climb, resulting in a runway overrun and collision with a fence.

Findings

Aircraft	Airspeed - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause) Incorrect action sequence - Pilot (Cause)
Environmental issues	Fence/fence post - Contributed to outcome

Factual Information

History of Flight

Takeoff	Abnormal runway contact Loss of control on ground (Defining event) Collision with terr/obj (non-CFIT)
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Pilot Information

Certificate:	Private	Age:	36, Male
Airplane Rating(s):	Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 None	Last FAA Medical Exam:	01/29/2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	12/18/2014
Flight Time:	(Estimated) 140.95 hours (Total, all aircraft), 80.65 hours (Total, this make and model), 72 hours (Pilot In Command, all aircraft), 4.7 hours (Last 90 days, all aircraft), 2.7 hours (Last 30 days, all aircraft), 1.7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AMERICAN	Registration:	N5720L
Model/Series:	AA 1 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	1969	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	AA1-0120
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	09/15/2015, Annual	Certified Max Gross Wt.:	1579 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2792 Hours as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-E2J
Registered Owner:	KH AIRCRAFT LLC	Rated Power:	150 hp
Operator:	KH AIRCRAFT LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KGTF, 3657 ft msl	Distance from Accident Site:	59 Nautical Miles
Observation Time:	1353 UTC	Direction from Accident Site:	279°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	14° C / 2° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Denton, MT (5U0)	Type of Flight Plan Filed:	None
Destination:	Denton, MT (5U0)	Type of Clearance:	None
Departure Time:	1750 MDT	Type of Airspace:	Class G

Airport Information

Airport:	DENTON (5U0)	Runway Surface Type:	Grass/turf
Airport Elevation:	3594 ft	Runway Surface Condition:	Soft
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	2550 ft / 180 ft	VFR Approach/Landing:	None

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:	47.320833, -109.941944 (est)

Administrative Information

Investigator In Charge (IIC):	Michael A Hicks	Report Date:	12/05/2016
Additional Participating Persons:	William Thomas; FAA; Helena, MT		
Publish Date:	12/05/2016		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93397		

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