



# Aviation Investigation Final Report

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<b>Location:</b>	Sedona, Arizona	<b>Accident Number:</b>	WPR20CA205
<b>Date &amp; Time:</b>	July 5, 2020, 10:30 Local	<b>Registration:</b>	N8868M
<b>Aircraft:</b>	Beech 23	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot was departing from an airport where the density altitude was 7,700 feet. While departing with a slight left quartering, the airplane lifted off from the runway near the mid field point and began slowly climbing. Crossing the end of the runway, the airplane yawed and then began to lose altitude. After the airplane exited the airport boundary, which was on a plateau, it continued to lose altitude and descended down the sloped terrain. Unable to gain airspeed or maintain altitude, the pilot initiated a forced landing to a road. During the landing, the right main and nose landing gear collapsed. The right wing and lower fuselage were substantially damaged. The pilot reported that there were no preaccident mechanical failures or malfunctions 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 inability to maintain a climb after an attempted takeoff in high density altitude conditions, which resulted in a forced landing on a road and subsequent landing gear collapse.

## Findings

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<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Climb capability - Not attained/maintained
<b>Environmental issues</b>	High density altitude - Effect on operation

## Factual Information

### History of Flight

<b>Initial climb</b>	Loss of control in flight (Defining event)
<b>Landing-flare/touchdown</b>	Landing gear collapse

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	55, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	November 18, 2019
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	April 30, 2020
<b>Flight Time:</b>	(Estimated) 9800 hours (Total, all aircraft), 30 hours (Total, this make and model), 97 hours (Pilot In Command, all aircraft), 45 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N8868M
<b>Model/Series:</b>	23 A23	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1964	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	M-606
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	August 28, 2019 100 hour	<b>Certified Max Gross Wt.:</b>	2350 lbs
<b>Time Since Last Inspection:</b>	17 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2799.98 Hrs at time of accident	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-346-A
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	165 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KSEZ,4827 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	10:35 Local	<b>Direction from Accident Site:</b>	72°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	3 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	240°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.14 inches Hg	<b>Temperature/Dew Point:</b>	32°C / 6°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Sedona, AZ (SEZ )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Chandler, AZ (CHD )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Sedona SEZ	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	4830 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	03	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5132 ft / 100 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	34.863887,-111.791946(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Nepomuceno, Eleazar
<b>Additional Participating Persons:</b>	Frank Waterhouse; FAA; Scottsdale, AZ
<b>Original Publish Date:</b>	January 29, 2021
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=101531">https://data.nts.gov/Docket?ProjectID=101531</a>

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