



# **Aviation Investigation Final Report**

Location: Cedar Mountain, Utah Accident Number: WPR23LA240

Date & Time: June 25, 2023, 11:30 Local Registration: N2358V

Aircraft: Cessna 140 Aircraft Damage: Substantial

**Defining Event:** Collision during takeoff/land **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot reported that, during the departure roll, the airplane became airborne at mid field. Shortly after, he felt a "settling sensation" and the airplane did not climb any further. The pilot checked the engine controls to ensure full power was available. Beyond the end of the runway, the airplane struck trees and came to rest between them. The airplane sustained substantial damage to both the wings and fuselage. The pilot reported that the temperature at the time of departure was 21° C, and that the airport elevation was 7550 ft msl. The pilot reported that there were no preaccident mechanical malfunctions or failures 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 decision to depart with a high density altitude, which degraded the airplane's climb performance and resulted in an impact with trees.

Climb rate - Not attained/maintained

#### **Findings**

**Aircraft** 

Personnel issues Decision making/judgment - Pilot

Environmental issues High density altitude - Effect on equipment

Page 2 of 6 WPR23LA240

## **Factual Information**

### **History of Flight**

Takeoff Collision during takeoff/land (Defining event)
--

#### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	63,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	May 24, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 18, 2023
Flight Time:	(Estimated) 2268 hours (Total, all aircraft), 315 hours (Total, this make and model), 2088 hours (Pilot In Command, all aircraft), 155 hours (Last 90 days, all aircraft), 47 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

#### **Passenger Information**

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	Unknown
Instrument Rating(s):		Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

Page 3 of 6 WPR23LA240

### **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N2358V
Model/Series:	140	Aircraft Category:	Airplane
Year of Manufacture:	1948	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	14594
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 1, 2023 Annual	Certified Max Gross Wt.:	1450 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2464 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	C-90-12-F
Registered Owner:	On file	Rated Power:	90 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:	KPUC,5831 ft msl	Distance from Accident Site:	23 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	302°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	25°C / -8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ephraim, UT (41U)	Type of Flight Plan Filed:	None
Destination:	Cedar Mountain, UT	Type of Clearance:	None
Departure Time:	10:40 Local	Type of Airspace:	Class G

Page 4 of 6 WPR23LA240

### **Airport Information**

Airport:	Cedar Mountain air strip None	Runway Surface Type:	Dirt
Airport Elevation:	7550 ft msl	<b>Runway Surface Condition:</b>	Dry;Rough
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	2000 ft / 30 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:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.188663,-110.60317(est)

Page 5 of 6 WPR23LA240

#### **Administrative Information**

Investigator In Charge (IIC):	Rho, Paul
Additional Participating Persons:	Stephen Grover; FAA; Salt Lake, UT
Original Publish Date:	October 26, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=192449

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.

Page 6 of 6 WPR23LA240