



# Aviation Investigation Final Report

<b>Location:</b>	Matanuska Glacier, Alaska	<b>Accident Number:</b>	ANC23LA050
<b>Date &amp; Time:</b>	July 13, 2023, 15:30 Local	<b>Registration:</b>	N460JC
<b>Aircraft:</b>	AVIAT AIRCRAFT INC A-1B	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision with terr/obj (non-CFIT)	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported he encountered downdrafts during landing on a remote gravel airstrip near a glacial base camp known for downdrafts and mountain rotors. He elected to depart the airstrip into rising terrain due to more favorable winds. During initial climb out the pilot reported the airplane encountered more downdrafts than expected. Unable to outclimb rising terrain, the pilot performed a forced landing in an area of rough, rock-covered terrain, and during landing the airplane sustained substantial damage to the wings and fuselage. The pilot reported that there were no pre-accident 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 airplane's encounter with downdrafts resulting in decreased performance insufficient to outclimb rising terrain.

## Findings

<b>Personnel issues</b>	Flight planning/navigation - Pilot
<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Aircraft</b>	Climb rate - Not attained/maintained
<b>Environmental issues</b>	Downdraft - Contributed to outcome

## Factual Information

### History of Flight

Initial climb	Collision with terr/obj (non-CFIT) (Defining event)
Initial climb	Off-field or emergency landing
Initial climb	Other weather encounter

### Pilot Information

Certificate:	Airline transport; Flight instructor; Military	Age:	37,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10020 hours (Total, all aircraft), 898 hours (Total, this make and model), 3266 hours (Pilot In Command, all aircraft), 261 hours (Last 90 days, all aircraft), 44 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Center
Other Aircraft Rating(s):		Restraint Used:	5-point
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	AVIAT AIRCRAFT INC	<b>Registration:</b>	N460JC
<b>Model/Series:</b>	A-1B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2006	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	2343
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	C126 installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	O-360-A1P
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	180
<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>	PAAQ,233 ft msl	<b>Distance from Accident Site:</b>	46 Nautical Miles
<b>Observation Time:</b>	14:53 Local	<b>Direction from Accident Site:</b>	271°
<b>Lowest Cloud Condition:</b>	Few / 3500 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	110°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.1 inches Hg	<b>Temperature/Dew Point:</b>	23°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Anchorage, AK (PAMR)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Anchorage, AK (PAMR)	<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>	Scandinavian Peaks Hut Airstrip	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	5150 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	

## 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>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	61.589432,-147.47834(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hill, Millicent
<b>Additional Participating Persons:</b>	Paula Huckleberry; Federal Aviation Administration (FAA) ; Wasilla , AK
<b>Original Publish Date:</b>	February 1, 2024
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=192639">https://data.nts.gov/Docket?ProjectID=192639</a>

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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](#).