



Aviation Investigation Final Report

Location:	Talkeetna, Alaska	Accident Number:	ANC23LA046
Date & Time:	July 1, 2023, 18:12 Local	Registration:	N3321B
Aircraft:	Piper PA-22	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While maneuvering a float-equipped airplane low-level over a river, the pilot turned the airplane downwind and it encountered a downdraft. The airplane subsequently lost altitude and the pilot added power to climb; however, the airplane's float impacted a gravel bar adjacent to the river. The airplane came to rest in an area of gravel-covered terrain, sustaining substantial damage to the fuselage. The pilot reported 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 encounter with a downdraft while maneuvering low-level, which resulted in a collision with terrain.

Findings

Personnel issues	Decision making/judgment - Pilot
Personnel issues	Identification/recognition - Pilot
Personnel issues	Aircraft control - Pilot
Environmental issues	Downdraft - Effect on equipment

Factual Information

History of Flight

Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT) (Defining event)
Maneuvering-low-alt flying	Other weather encounter

Pilot Information

Certificate:	Private	Age:	38,Female
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	September 10, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 29, 2022
Flight Time:	266.8 hours (Total, all aircraft), 230.3 hours (Total, this make and model), 120.1 hours (Pilot In Command, all aircraft), 25.4 hours (Last 90 days, all aircraft), 4.2 hours (Last 30 days, all aircraft)		

Passenger Information

Certificate:		Age:	40,Female
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	Unknown
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Passenger Information

Certificate:		Age:	Female
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	Unknown
Instrument Rating(s):		Second Pilot Present:	No
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

Aircraft Make:	Piper	Registration:	N3321B
Model/Series:	PA-22	Aircraft Category:	Airplane
Year of Manufacture:	1954	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-2136
Landing Gear Type:	Float	Seats:	4
Date/Type of Last Inspection:	June 7, 2023 Annual	Certified Max Gross Wt.:	1950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5261.1 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	O-320
Registered Owner:	AK8 ASSETS LLC	Rated Power:	150 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:	ATK,350 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	12:53 Local	Direction from Accident Site:	14°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	18°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Talkeenta, AK (AK8)	Type of Flight Plan Filed:	Company VFR
Destination:	Cheltna Lake, AK	Type of Clearance:	None
Departure Time:	13:45 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	62.29196,-150.11253

Administrative Information

Investigator In Charge (IIC):	Hill, Millicent
Additional Participating Persons:	Arthur Racioc; FAA/FSDO; Anchorage, AK
Original Publish Date:	December 7, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=192552

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](#).