



Aviation Investigation Final Report

Location:	Lone Pine, California	Accident Number:	WPR23LA322
Date & Time:	August 18, 2023, 19:10 Local	Registration:	N4537Y
Aircraft:	GRUMMAN AMERICAN AVN. CORP. AA-5B	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, while conducting a low pass over an off-airport landing strip at an altitude of 100 ft above the ground, the airplane encountered a downdraft. The pilot felt the airplane was unable to climb out of the valley without stalling, so he maintained airspeed, but the airplane descended and impacted the ground. The airplane subsequently rebounded and came to a rest in an upright position, which resulted in substantial damage to both wings, fuselage, and empennage. 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 inability to maintain altitude after encountering a downdraft, which resulted in collision with terrain.

Findings

Personnel issues	Identification/recognition - Pilot
Aircraft	Climb rate - Capability exceeded
Aircraft	Altitude - Not attained/maintained
Environmental issues	Mountainous/hilly terrain - Effect on operation
Environmental issues	Downdraft - Ability to respond/compensate
Environmental issues	Downdraft - Contributed to outcome

Factual Information

History of Flight

Approach	Other weather encounter
Maneuvering	Loss of control in flight
Approach	Collision with terr/obj (non-CFIT) (Defining event)

Pilot Information

Certificate:	Private	Age:	61,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	August 17, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 10, 2023
Flight Time:	1097 hours (Total, all aircraft), 16 hours (Total, this make and model), 1023 hours (Pilot In Command, all aircraft), 70 hours (Last 90 days, all aircraft), 32 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN AMERICAN AVN. CORP.	Registration:	N4537Y
Model/Series:	AA-5B	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	AA5B1292
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	July 11, 2023 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	25 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2209.8 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	A4K
Registered Owner:	On file	Rated Power:	180 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:	KNID, 2231 ft msl	Distance from Accident Site:	40 Nautical Miles
Observation Time:	11:56 Local	Direction from Accident Site:	144°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	36°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Santa Monica, CA (KSMO)	Type of Flight Plan Filed:	None
Destination:	Santa Monica, CA (KSMO)	Type of Clearance:	None
Departure Time:	11:11 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	N/A	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	36.226698,-118.16611

Administrative Information

Investigator In Charge (IIC):	Rho, Paul
Additional Participating Persons:	Julien Roark; Federal Aviation Administration; Fresno, CA Jeremy Alexander; Federal Aviation Administration; Fresno, CA
Original Publish Date:	November 30, 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=192924

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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](#).