

Aviation Investigation Final Report

Location: CUMMINGS, Georgia Accident Number: ATL93LA098

Date & Time: May 31, 1993, 12:53 Local **Registration:** N74092

Aircraft: GRUMMAN AA5B Aircraft Damage: Substantial

Defining Event: 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

THE PILOT COMPLETED A PREFLIGHT INSPECTION AND RUNUP BEFORE ATTEMPTING THE TAKEOFF. THERE WERE NO AIRCRAFT PROBLEMS NOTED DURING THE PREFLIGHT, AND ALL SYSTEMS, INCLUDING THE CARBURETOR HEAT, OPERATED NORMALLY DURING THE SUBSEQUENT RUNUP PROCEDURE. ACCORDING TO THE PILOT, HE EXPERIENCED A GRADUAL LOSS OF ENGINE POWER DURING THE INITIAL TAKEOFF ATTEMPT FROM A 1500 FOOT LONG PRIVATE SOD AIRSTRIP. REALIZING THAT A SAFE CLIMB WAS NOT POSSIBLE, THE PILOT ABORTED THE TAKEOFF ATTEMPT AFTER THE AIRPLANE CLIMBED A FEW FEET. THE AIRPLANE SETTLED BACK ONTO THE RUNWAY AND ROLLED OFF THE DEPARTURE END OF RUNWAY 29. EXAMINATION OF THE WRECKAGE FAILED TO DISCLOSE A SYSTEM MALFUNCTION OR COMPONENT FAILURE. EXAMINATION OF WEATHER DATA REVEALED THAT CONDITIONS WERE FAVORABLE FOR THE FORMATION OF CARBURETOR ICE. THE PILOT DID NOT RECEIVE A WEATHER BRIEFING BEFORE THE TAKEOFF ATTEMPT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE LOSS OF ENGINE POWER RESULTING FROM THE FORMATION OF CARBURETOR ICE DURING THE GROUND OPERATION. A FACTOR WAS THE PILOT'S FAILURE TO OBTAIN A WEATHER BRIEFING.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) WEATHER CONDITION - CARBURETOR ICING CONDITIONS

2. (F) PREFLIGHT BRIEFING SERVICE - NOT OBTAINED - PILOT IN COMMAND

3. (C) FUEL SYSTEM, CARBURETOR - ICE

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: OVERRUN

Phase of Operation: TAKEOFF - ABORTED

Occurrence #4: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - ABORTED

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Factual Information

On May 31, 1993, at 1253 eastern daylight time a Grumman AA5B, N74092, collided with the ground during an attempted takeoff from a private airstrip near Cummings, Georgia. The flight operated under 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The airplane sustained substantial damage and the pilot received minor injuries. The accident occurred during the initial takeoff attempt from Cummings.

According to the pilot, he completed a preflight inspection which included an engine runup; all systems operated normally, including the carburetor heat system. The pilot planned to depart Cummings on a local personal flight before rain showers moved into the immediate area. He taxied the airplane to the active runway and began the takeoff. During the initial climb after lift off, the engine gradually lost power. The takeoff was aborted, the airplane settled back onto the 1500 foot sod runway, and rolled off the departure end of the runway. According to the pilot, the engine continued to run throughout the entire sequence of events until he shut it down.

Examination of the airplane failed to disclose a mechanical malfunction or component failure. A review of the weather data disclosed that conditions were favorable for the formation of carburetor icing. There was no record of a pilot weather briefing prior to the flight.

Pilot Information

Certificate:	Private	Age:	50,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 18, 1991
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	613 hours (Total, all aircraft), 194 hours (Total, this make and model), 12 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN	Registration:	N74092
Model/Series:	AA5B AA5B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	AA5-0127
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	October 10, 1992 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1301 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360-A4K
Registered Owner:	BENNETT, JEWELL M.	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PDK,1129 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	12:50 Local	Direction from Accident Site:	190°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	1
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:54 Local	Type of Airspace:	Class G

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Airport Information

Airport:	PRIVATE NONE	Runway Surface Type:	Grass/turf
Airport Elevation:	1252 ft msl	Runway Surface Condition:	Dry
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	1500 ft / 40 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	

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Administrative Information

Investigator In Charge (IIC):	Powell, Phillip	
Additional Participating Persons:	BEOTIS WRIGHT; COLLEGE PARK, GA	
Original Publish Date:	September 30, 1994	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=3216	

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.

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