



Aviation Investigation Final Report

Location:	RIDGELAND, South Carolina	Accident Number:	ATL89LA001
Date & Time:	October 1, 1988, 11:15 Local	Registration:	N26827
Aircraft:	GRUMMAN AA-5A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PLT REPORTED THAT THE LEFT BRAKE FAILED TO FUNCTION DURING TAXI WHEN HE ATTEMPTED TO REDUCE SPEED AND TURN 180 DEG INTO T/O POSITION. THE AIRPLANE BEGAN TO TRACK TO THE RIGHT. HE RELEASED BRAKE PRESSURE ON BOTH PEDALS THINKING THAT HE MIGHT HAVE BEEN APPLYING PRESSURE TO THE RUDDER PEDAL INSTEAD OF THE BRAKE PEDAL. HE THEN REAPPLIED PRESSURE AND EXPERIENCED THE SAME RESULTS. AT THAT POINT, HE REDUCED THE POWER TO IDLE. THE AIRPLANE RAN OFF THE SIDE OF THE RWY. TRAVELED DOWN AN EMBANKMENT, AND FLIPPED OVER. EXAM OF THE ACFT REVEALED A HOLE IN THE LEFT BRAKE-SYSTEM PRESSURE LINE BEHIND THE CO-PLT BRAKE PEDALS. THE HOLE HAD RESULTED FROM CHAFING BETWEEN A MOUNTING CLAMP & THE LINE. THE LINE & CLAMP WERE PROPERLY INSTALLED. THE HOLE WAS NOT VISIBLE UNTIL THE CLAMP WAS REMOVED. CORROSION WAS ALSO NOTED ON THE LINE IN THE AREA OF THE HOLE. A SEARCH OF FAA SDR'S REVEALED NO REPORTS OF SIMILAR FAILURES.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAXI - TO TAKEOFF

Findings

1. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - CORRODED
2. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - CHAFED
3. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - LEAK

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: TAXI - TO TAKEOFF

Findings

4. (F) TAXISPEED - EXCESSIVE - PILOT IN COMMAND
5. (F) THROTTLE/POWER CONTROL - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #3: NOSE OVER

Phase of Operation: TAXI - TO TAKEOFF

Findings

6. TERRAIN CONDITION - DOWNHILL

Factual Information

Pilot Information

Certificate:	Private	Age:	39, 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 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 26, 1988
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	322 hours (Total, all aircraft), 104 hours (Total, this make and model), 171 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN	Registration:	N26827
Model/Series:	AA-5A AA-5A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	AA5A0746
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	May 6, 1988 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	32 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	938 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	O-320-E2G
Registered Owner:	ROBINSON, CERRONNIE	Rated Power:	150 Horsepower
Operator:	CERRONNIE ROBINSON	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered	Visibility	5 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	27°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:		Type of Flight Plan Filed:	VFR
Destination:	ALBANY , GA (ABY)	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	RIDGELAND 3J1	Runway Surface Type:	Asphalt
Airport Elevation:	79 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	3100 ft / 70 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	32.480815,-80.979835(est)

Administrative Information

Investigator In Charge (IIC):	Strickland, Scott
Additional Participating Persons:	DAVID SEXTON; WEST COLUMBIA , SC L P SHEARER; WEST COLUMBIA , SC
Original Publish Date:	January 24, 1990
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=7933

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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](#).