



Aviation Investigation Final Report

Location:	DULUTH, Georgia	Incident Number:	ATL82IA245
Date & Time:	August 25, 1982, 10:00 Local	Registration:	N2163W
Aircraft:	BEECH C23	Aircraft Damage:	Minor
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

DURING PREFLIGHT, THE PILOT FOUND THE RIGHT AILERON FRONT PUSH-PULL ROD END BROKEN. THIS DEFECT WOULD HAVE PRECLUDED AILERON CONTROL. METALLURGICAL EXAMINATION OF THE FRACTURE REVEALED THAT THE PART HAD FAILED DUE TO REVERSE BENDING FATIGUE AS A RESULT OF INADEQUATE LUBRICATION.

Probable Cause and Findings

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: STANDING - PRE-FLIGHT

Findings

1. (C) FLT CONTROL SYST,AILERON CONTROL - FATIGUE
2. (C) MAINTENANCE,INSTALLATION - INADEQUATE - COMPANY MAINTENANCE PERSONNEL
3. (C) FLT CONTROL SYST,AILERON CONTROL - DISCONNECTED
4. (C) FLT CONTROL SYST,AILERON CONTROL - FAILURE,TOTAL

Factual Information

Pilot Information

Certificate:	Student	Age:	33, Male
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	December 11, 1981
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	62 hours (Total, all aircraft), 56 hours (Total, this make and model), 56 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N2163W
Model/Series:	C23 C23	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	M-1550
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	221 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1172 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	O-360-A4J
Registered Owner:	MARIANE S. MARRS	Rated Power:	180 Horsepower
Operator:	MARIANE S. MARRS	Operating Certificate(s) Held:	
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:	Clear	Visibility	
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	DULUTH , GA (17A)	Type of Flight Plan Filed:	None
Destination:	DULUTH , GA (17A)	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	

Airport Information

Airport:	GWINNETT COUNTY 17A	Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date: August 25, 1983

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=70518>

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](#).