

# **Aviation Investigation Final Report**

Location:	MURFREESBORO, 1	Fennessee	Accident Number:	ATL88LA039
Date & Time:	November 14, 1987	7, 08:00 Local	Registration:	N41298
Aircraft:	PIPER	PA-34-200	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General av	iation - Personal		

### **Analysis**

THE RT WHEEL BRAKE FAILED WHILE THE AIRPLANE WAS TAXIING ON A PARALLEL TAXIWAY. THE FAILURE OCCURRED NEAR THE END OF THE TAXIWAY, JUST AS THE PLT WAS ABOUT TO TURN THE AIRPLANE ONTO THE RWY. THE PLT SUBSEQUENTLY ATTEMPTED TO TURN THE AIRPLANE USING DIFFERENTIAL POWER. THE AIRPLANE CROSSED THE RWY AND RAN INTO TREES ON THE OPPOSITE SIDE OF THE RWY. THE PLT PULLED THE MIXTURE CONTROLS TO IDLE CUTOFF JUST BEFORE THE AIRPLANE RAN OFF THE RWY. THE AIRPLANE SUSTAINED STRUCTURAL DAMAGE TO ONE OF THE WINGS. POST-ACCIDENT EXAMINATION OF THE RT BRAKE REVEALED THAT THE BRAKE PADS WERE COMPLETELY WORN AWAY. THE ACFT RPTDLY UNDERWENT AN ANNUAL INSPECTION ABOUT 1 MONTH BEFORE THE ACCIDENT.

### **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. (F) LANDING GEAR, NORMAL BRAKE SYSTEM - WORN

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Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER Phase of Operation: TAXI - TO TAKEOFF

Findings

(F) DIRECTIONAL CONTROL - REDUCED
(C) REMEDIAL ACTION - IMPROPER - PILOT IN COMMAND
(C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: TAXI - TO TAKEOFF

Findings 5. OBJECT - TREE(S)

# **Factual Information**

## Pilot Information

Certificate:	Commercial; Flight instructor	Age:	22,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	August 25, 1987
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	950 hours (Total, all aircraft), 250 hours (Total, this make and model), 790 hours (Pilot In Command, all aircraft), 194 hours (Last 90 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N41298
Model/Series:	PA-34-200 PA-34-200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34-7450106
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	October 18, 1987 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	59 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	2569 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360-C1E6
Registered Owner:	JOHANNES VAN OVOST	Rated Power:	200 Horsepower
Operator:	COASTAL FLIGHT CENTER, INC.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

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Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	13°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	

### **Airport Information**

Airport:	MURFREESBORO MUNI MBT	Runway Surface Type:	
Airport Elevation:		<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	35.850322,-86.39022(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Strickland, Scott		
Additional Participating Persons:	LARRY WILLIAMS; NASHVILLE , TN		
Original Publish Date:	February 14, 1989		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=7677		

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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 <u>here</u>.