



# Aviation Investigation Final Report

<b>Location:</b>	BIG BEAR CITY, California	<b>Accident Number:</b>	LAX87LA022
<b>Date &amp; Time:</b>	October 20, 1986, 13:15 Local	<b>Registration:</b>	N9206D
<b>Aircraft:</b>	PIPER PA-22-160	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE ACFT VEERED OFF RWY 7 DURING LANDING ROLL. THE PLT INDICATED THE ACFT VEERED TO THE RIGHT. THERE WAS A SINGLE RUBBER SKID MARK APRX 150 FT LONG FOUND ON THE RWY. THE WIND WAS REPORTED BY ANOTHER PLT TO BE 'DOWN THE RUNWAY AT 10-15 KNOTS.' EXAMINATION OF THE ACFT REVEALED THE LEFT BRAKE MASTER CYLINDER FAILED. METAL PARTICLES HAD CONTAMINATED THE BRAKE FLUID. VISUAL INSPECTION OF THE CYLINDER WALLS SHOWED SIGNS OF DETERIORATION.

## 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: LANDING - ROLL

#### Findings

1. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - WORN
  2. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - FAILURE,PARTIAL
  3. (F) FLUID,HYDRAULIC - CONTAMINATION
- 

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

Phase of Operation: LANDING - ROLL

Findings

- 4. (C) BRAKES(NORMAL) - NOT POSSIBLE - PILOT IN COMMAND
- 5. (C) DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND

-----

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline transport; Commercial; Flight engineer	<b>Age:</b>	47, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	May 12, 1986
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	13244 hours (Total, all aircraft), 69 hours (Total, this make and model), 6030 hours (Pilot In Command, all aircraft), 214 hours (Last 90 days, all aircraft), 84 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N9206D
<b>Model/Series:</b>	PA-22-160 PA-22-160	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	22-6265
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	November 17, 1985 Annual	<b>Certified Max Gross Wt.:</b>	1840 lbs
<b>Time Since Last Inspection:</b>	17 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3168 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320-B2B
<b>Registered Owner:</b>	MUELLNER, PETER M.	<b>Rated Power:</b>	160 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	SBD ,1157 ft msl	<b>Distance from Accident Site:</b>	22 Nautical Miles
<b>Observation Time:</b>	12:50 Local	<b>Direction from Accident Site:</b>	225°
<b>Lowest Cloud Condition:</b>	Scattered / 6000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	240°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 9°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	SAN DIEGO , CA (SAN )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	BIG BEAR CITY , CA (L35 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	BIG BEAR CITY L35	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	6750 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	7	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5850 ft / 75 ft	<b>VFR Approach/Landing:</b>	Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	34.259094,-116.84027(est)

## Administrative Information

**Investigator In Charge (IIC):** Wilcox, Thomas

**Additional Participating Persons:**

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=25458>

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](#).