



Aviation Investigation Final Report

Location:	PORTERVILLE, California	Accident Number:	LAX86LA351
Date & Time:	September 15, 1986, 10:50 Local	Registration:	N3879V
Aircraft:	CESSNA 195	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Executive/Corporate		

Analysis

AFTER A NORMAL LANDING THE PILOT SAID HE BEGAN TO APPLY MODERATE BRAKE PRESSURE TO MAKE THE MID-FIELD TAXIWAY TURN OFF AND FELT WHAT HE DESCRIBED AS 'A LIGHT JERK IN THE LEFT GEAR' FOLLOWED BY A 'SNAPPING SOUND WHICH OCCURRED TWO OR THREE TIMES.' THE PILOT THEN SAID THE LEFT BRAKE FAILED COMPLETELY AND THE 'AIRCRAFT VEERED TO THE RIGHT AND ENTERED A GROUND LOOP.' EXAMINATION OF THE LEFT BRAKE REVEALED THAT THE LEFT BRAKE DISC DRIVE KEY RETAINING SCREW FAILED, WHICH ALLOWED THE KEY TO FLOAT LOOSE IN THE BRAKE HOUSING. THE MECHANIC WHO EXAMINED THE BRAKE SYSTEM STATED THAT THE LOOSE KEY 'BROKE OUT THE LOWER PART OF THE HOUSING ALLOWING THE BRAKE LINING TO FALL OUT.'

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 - FAILURE,PARTIAL

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

2. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND
3. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	69, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	May 12, 1986
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	8683 hours (Total, all aircraft), 3559 hours (Total, this make and model), 8500 hours (Pilot In Command, all aircraft), 136 hours (Last 90 days, all aircraft), 41 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N3879V
Model/Series:	195 195	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	7347
Landing Gear Type:	Tailwheel	Seats:	6
Date/Type of Last Inspection:	August 7, 1986 Annual	Certified Max Gross Wt.:	3150 lbs
Time Since Last Inspection:	51 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4910 Hrs	Engine Manufacturer:	JACOBS
ELT:	Installed, not activated	Engine Model/Series:	R755A-2
Registered Owner:	GRAND CANYON DORIES, INC.	Rated Power:	300 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:	BFL ,490 ft msl	Distance from Accident Site:	36 Nautical Miles
Observation Time:	10:50 Local	Direction from Accident Site:	155°
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	19°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GRAND CANYON , AZ (GCN)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	07:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	PORTERVILLE MUNI PTV	Runway Surface Type:	Asphalt
Airport Elevation:	444 ft msl	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	6000 ft / 146 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	35.959465,-118.919639(est)

Administrative Information

Investigator In Charge (IIC):	Rich, Jeff
Additional Participating Persons:	JOHN ROACH; FRESNO , CA
Original Publish Date:	
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=25259

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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](#).