



Aviation Investigation Final Report

Location:	MOAB, Utah	Accident Number:	DEN00LA100
Date & Time:	June 2, 2000, 13:05 Local	Registration:	N34783
Aircraft:	Culver LFA	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was taking off on runway 21. As he raised the tail for lift off (about 50 mph), the airplane 'abruptly swerved to left (90 degrees), [departed] the runway, crossed a dirt border about 6 feet wide, flipped on its back, and slid down to the bottom of a drainage ditch between the runway and the adjacent taxiway.' The pilot said the airplane was equipped with Goodyear 'expanded tube' brakes, known to lock up if overheated (brakes were used for landing and for taxi to takeoff). An airport mechanic attempted to turn the left main wheel by hand shortly after the accident, and found the wheel to be binding. The right wheel turned freely. Later, he tried again and the wheel turned freely.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Overheating of the left brake, causing the wheel to lock. Factors were the pilot not being able to maintain directional control, a dirt berm, and a drainage ditch.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - OVERTEMPERATURE
2. (C) LANDING GEAR,WHEEL - LOCKED

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

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

3. (F) DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #3: NOSE OVER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

4. (F) TERRAIN CONDITION - BERM

5. (F) TERRAIN CONDITION - DITCH

Factual Information

On June 2, 2000, at 1305 mountain daylight time, a Culver LFA, N34783, registered to A Pair of Jacks, Inc., was destroyed when it collided with terrain during takeoff at Canyonlands Field, Moab, Utah. The commercial pilot, the sole occupant aboard, was not injured. Visual meteorological conditions prevailed, and no flight plan had been filed for the personal flight being conducted under Title 14 CFR Part 91. The flight was originating at the time of the accident.

In a telephone interview and in the accident report, the pilot said he had stopped at Moab for fuel, and was taking off on runway 21, en route to Canon City, Colorado. As he raised the tail for lift off (about 50 mph), the airplane "abruptly swerved to left (90 degrees), [departed] the runway, crossed a dirt border about 6 feet wide, flipped on its back, and slid down to the bottom of a drainage ditch between the runway and the adjacent taxiway."

The pilot said his airplane was equipped with Goodyear "expanded tube" brakes, known to lock up if they overheat (the pilot had used the brakes during landing and for taxi to takeoff). The airport mechanic attempted to turn the left main wheel by hand shortly after the accident, and found the wheel to be binding. The right wheel turned freely. Later, he tried again and the wheel turned freely.

Pilot Information

Certificate:		Age:	U
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Unknown Unknown	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Culver	Registration:	N34783
Model/Series:	LFA LFA	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	Unknown
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:		Rated Power:	
Operator:	A PAIR OF JACKS, INC.	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:	Not reported
Observation Facility, Elevation:	CNY	Distance from Accident Site:	
Observation Time:	11:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / 14 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(CNY)	Type of Flight Plan Filed:	None
Destination:	CANON CITY , CO (1V6)	Type of Clearance:	
Departure Time:	00:00 Local	Type of Airspace:	

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	Unknown
Ground Injuries:	N/A	Aircraft Explosion:	Unknown
Total Injuries:	1 None	Latitude, Longitude:	38.529758,-109.549476(est)

Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	LES W DENAUGHEL;
Original Publish Date:	December 4, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=49344

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](#).