



National Transportation Safety Board Aviation Accident Final Report

Location:	LAS VEGAS, NV	Accident Number:	DEN90LA050
Date & Time:	02/03/1990, 1205 PST	Registration:	N25CH
Aircraft:	CHRISTEN INDUSTRIES PITTS	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE PILOT SAID THAT DURING LANDING ROLL ON A FUEL STOP, THE AIRPLANE SWERVED TO THE LEFT. HE ATTEMPTED TO CORRECT WITH RIGHT BRAKE, TO NO AVAIL. THE PLANE GROUND LOOPED OFF THE LEFT SIDE OF THE RWY AND ENTERED SOFT TERRAIN. THE PLANE NOSED OVER AND CAME TO REST INVERTED. A POST-ACCIDENT INVESTIGATION BY AN FAA INSPECTOR REVEALED THAT THE RIGHT BRAKE PADS WERE WORN AND REQUIRED MORE FLUID FROM THE BRAKE RESERVOIR. THE FLUID LEVEL IN THE RESERVOIR WAS LOW. NO LEAKS OR OTHER PROBLEMS WERE FOUND ON THE BRAKE SYSTEM. THIS AIRCRAFT WAS AN EXPERIMENTAL DESIGN WITH LANDING GEAR ON THE TOP SIDE OF THE WINGS, MAKING IT CAPABLE OF INVERTED LANDINGS. THE SAME FLUID RESERVOIR SERVED BOTH SETS OF BRAKES.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL AFTER A PARTIAL FAILURE OF THE NORMAL BRAKE SYSTEM.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

1. FLUID, HYDRAULIC - LOW LEVEL
2. (C) LANDING GEAR, NORMAL BRAKE SYSTEM - FAILURE, PARTIAL
3. (F) MAINTENANCE, SERVICE OF AIRCRAFT/EQUIPMENT - INADEQUATE - PILOT IN COMMAND
4. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: NOSE OVER

Phase of Operation: LANDING - ROLL

Findings

5. TERRAIN CONDITION - SOFT

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	44, Male
Airplane Rating(s):	Multi-engine Land; Multi-engine Sea; Single-engine Land; Single-engine Sea	Seat Occupied:	Rear
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine; Helicopter; Instrument Airplane; Instrument Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	01/05/1990
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	7825 hours (Total, all aircraft), 352 hours (Total, this make and model), 7538 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CHRISTEN INDUSTRIES	Registration:	N25CH
Model/Series:	PITTS PITTS	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Experimental	Serial Number:	5106
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	03/17/1989, Annual	Certified Max Gross Wt.:	1700 lbs
Time Since Last Inspection:	229 Hours	Engines:	1 Reciprocating
Airframe Total Time:	698 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	AEIO-540-D4A5
Registered Owner:	CRAIG HOSKING	Rated Power:	260 hp
Operator:	HOSKING AEROBATICS	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	50 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	32 inches Hg	Temperature/Dew Point:	13° C
Precipitation and Obscuration:			
Departure Point:	WOODS CROSS, UT (BTF)	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	1005 MST	Type of Airspace:	Class B; TRSA

Airport Information

Airport:	MCCARRAN (LAS)	Runway Surface Type:	Asphalt
Airport Elevation:	2174 ft	Runway Surface Condition:	Dry
Runway Used:	19R	IFR Approach:	None
Runway Length/Width:	5000 ft / 75 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	ROBERT B COLLINS	Report Date:	09/29/1992
Additional Participating Persons:	BOB TROUT; LAS VEGAS, NV		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).