



National Transportation Safety Board Aviation Accident Final Report

Location:	ROLLA, MO	Accident Number:	CHI96LA001
Date & Time:	10/01/1995, 1130 CDT	Registration:	N272Y
Aircraft:	LUSCOMBE PHANTOM 1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE PILOT REPORTED FULL RIGHT RUDDER INPUT WOULD NOT STOP THE AIRCRAFT FROM TURNING LEFT DURING LANDING ROLL. THE AIRCRAFT DEPARTED THE RUNWAY, COMING TO REST OPPOSITE THE LANDING DIRECTION. A SINGLE TIRE SKID MARK APPROXIMATELY 15 FEET LONG WAS LOCATED 100 FEET FROM THE RUNWAY END. THE PILOT THOUGHT THE LEFT BRAKE LOCKED DURING LANDING. N272Y IS EQUIPPED WITH MECHANICAL BRAKES WHICH ARE OPERATED BY CABLES.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: mechanical failure of the left brake.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - BINDING(MECHANICAL)

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Factual Information

On October 1, 1995, at 1130 central daylight time (cdt), a Luscombe Phantom 1, N272Y, piloted by an airline transport pilot was substantially damaged when it ran off the edge of runway 27 (3,028' x 36' dry asphalt) while landing at Rolla Downtown Airport, Rolla, Missouri. The personal 14 CFR part 91 flight was not operating on a flight plan. Visual meteorological conditions existed at the time of the accident. The pilot reported no injuries. The flight departed Matton, Illinois, at 1000 cdt.

The pilot reported after the aircraft touched down, full right rudder input would not stop the aircraft from turning left. The aircraft departed the left side of the runway, coming to rest opposite the landing direction. Examination of runway 27 revealed a single tire skid mark approximately 15 feet long located 100 feet from the runway end. N272Y is equipped with mechanical brakes which are operated by cables.

During a telephone interview with the pilot he said he thought the left brake locked. The pilot said the runway was in poor condition. The airport facility directory states that the runway has broken asphalt with loose material, and is rolling and uneven. During a telephone conversation with the airport operator he said the airport runway was currently being resurfaced.

N272Y'S landing gear strut wires failed during the accident. The pilot said the landing gear strut wires had been chromed, which may have weakened them.

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Flight Engineer	Age:	41, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	09/13/1995
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	13000 hours (Total, all aircraft), 350 hours (Total, this make and model), 9500 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	LUSCOMBE	Registration:	N272Y
Model/Series:	PHANTOM 1 PHANTOM 1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	131
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	06/15/1995, Annual	Certified Max Gross Wt.:	1950 lbs
Time Since Last Inspection:	15 Hours	Engines:	1 Reciprocating
Airframe Total Time:	475 Hours	Engine Manufacturer:	WARNER
ELT:	Installed, not activated	Engine Model/Series:	SCARAB S-50
Registered Owner:	DOUGLAS P. COMBS	Rated Power:	145 hp
Operator:	DOUGLAS P. COMBS	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	VIH, 1148 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	1651 CST	Direction from Accident Site:	30°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	22° C / 9° C
Precipitation and Obscuration:			
Departure Point:	MATTOON, IL (MTO)	Type of Flight Plan Filed:	None
Destination:	(K07)	Type of Clearance:	None
Departure Time:	1000 CDT	Type of Airspace:	Class E

Airport Information

Airport:	ROLLA DOWNTOWN (K07)	Runway Surface Type:	Asphalt
Airport Elevation:	987 ft	Runway Surface Condition:	Rough
Runway Used:	27	IFR Approach:	
Runway Length/Width:	3028 ft / 36 ft	VFR Approach/Landing:	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):	DAVID A BOLDENOW	Report Date:	01/08/1997
Additional Participating Persons:	TIM MOON; ST. ANN, MO		
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.ntsbt.gov/pubdms/ .		

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