



Aviation Investigation Final Report

Location: Springfield, Illinois Accident Number: CEN09CA421

Date & Time: July 7, 2009, 19:47 Local Registration: N18BT

Aircraft: Pitts S-2A Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that he was landing the tail wheel equipped airplane when the accident happened. He stated that the airplane touched down on one main wheel first and the airplane shifted and rapidly turned right. He stated that the airplane's movement resulted in his passenger's body shifting to the left against the left rudder/brake pedal. The rear seat rudder pedals are located near the front seat occupant's hips. The pilot stated that he attempted to correct with left rudder, but was unable due to the obstruction of the rudder pedal by the front seat passenger's body. The airplane subsequently ground looped. The damage to the airplane included collapse of the main landing gear, damage to the left lower wing, and damage to the upper wing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inability to maintain directional control while landing due to the unintentional obstruction of the rudder by the passenger.

Findings

Aircraft Directional control - Attain/maintain not possible

Aircraft Rudder control system - Not specified

Personnel issues (general) - Passenger

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Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)		
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Pilot Information

Certificate:	Commercial	Age:	43,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	August 14, 2008
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 1, 2009
Flight Time:	3500 hours (Total, all aircraft), 450 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Pitts	Registration:	N18BT
Model/Series:	S-2A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Aerobatic; Normal	Serial Number:	2221
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	July 1, 2009 Annual	Certified Max Gross Wt.:	1575 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2590 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	AEIO-360 SER
Registered Owner:	On file	Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SPI,597 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	19:52 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Broken / 10000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	0 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.85 inches Hg	Temperature/Dew Point:	26°C / 21°C
Precipitation and Obscuration:			
Departure Point:	Springfield, IL (SPI)	Type of Flight Plan Filed:	None
Destination:	Springfield, IL (SPI)	Type of Clearance:	VFR
Departure Time:	19:00 Local	Type of Airspace:	

Airport Information

Airport:	Abraham Lincoln Capital Airpor SPI	Runway Surface Type:	Asphalt
Airport Elevation:	597 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	7400 ft / 150 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.844165,-89.678054

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Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	William L Cooley; FAA-Springfield FSDO; Springfield, IL
Original Publish Date:	September 30, 2009
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=74228

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.

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