



# **Aviation Investigation Final Report**

Location: MATTOON, Illinois Accident Number: CHI99LA151

Date & Time: May 15, 1999, 12:45 Local Registration: N64DE

Aircraft: Engleman PITTS S1 Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

The pilot made a 3-point landing and the initial portion of the landing roll was normal. He reported the airplane then began to '...veer sharply to the right.' He was unable to correct the directional control of the airplane. The left main gear collapsed and the left lower wingtip along with the propeller contacted the runway prior to the airplane coming to rest on a heading of about 180 degrees. Inspection of the airplane failed to reveal any failure/malfunction of the airplane's brake system. A fuel line was located near the left brake which may have interfered with the pilot pressing on the brake pedal.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain directional control and inadvertent ground loop/swerve. A related factor was the crosswind.

### **Findings**

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

Phase of Operation: LANDING - ROLL

#### **Findings**

1. (F) WEATHER CONDITION - CROSSWIND

2. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

-----

Occurrence #2: MAIN GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Findings
4. LANDING GEAR, MAIN GEAR ATTACHMENT - OVERLOAD

Page 2 of 6 CHI99LA151

#### **Factual Information**

On May 15, 1999, at 1245 central daylight time (cdt), an Engleman Pitts S1, N64DE, operated by a commercial pilot ground looped while landing at the Coles County Memorial Airport, Mattoon, Illinois. The pilot was not injured. The airplane was substantially damaged. The 14 CFR Part 91 personal flight was operating in visual meteorological conditions without a flight plan. The local flight originated from Mattoon, Illinois, at 1157 cdt.

The pilot reported that prior to the accident he made three landings on Runway 17 which was a grass airstrip. He then flew in the local area for approximately 20 minutes and came back to land on Runway 11 (6,501' x 150'). The pilot reported the local winds were from 170 degrees at 10 knots. The pilot reported he made a 3-point landing and the initial portion of the landing roll was normal. He reported the airplane then began to "...veer sharply to the right." The pilot reported he was unable to correct the directional control and the airplane continued to the right. The left main gear collapsed and the left lower wingtip along with the propeller contacted the runway prior to the airplane coming to rest on a heading of about 180 degrees.

An inspector from the Springfield, Illinois, Federal Aviation Administration Flight Standards District Office examined the airplane after the accident. The inspector reported that he was unable to find any failure/malfunction of the airplane's brake system. He did state that there was a fuel line which ran near the left brake pedal and it was possible that line interfered with the pilot pressing on the brake.

#### **Pilot Information**

Certificate:	Commercial	Age:	52.Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
All plane Rating(s).	Single-engine land	Seat Occupieu.	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	December 12, 1997
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	756 hours (Total, all aircraft), 11 hours (Total, this make and model), 668 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Page 3 of 6 CHI99LA151

## **Aircraft and Owner/Operator Information**

Aircraft Make:	Engleman	Registration:	N64DE
Model/Series:	PITTS S1 PITTS S1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	DE001
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	October 21, 1998 Annual	Certified Max Gross Wt.:	1050 lbs
Time Since Last Inspection:	6 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	406 Hrs	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	0-290
Registered Owner:	JIMMY T. STEWART	Rated Power:	125 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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Scattered / 4500 ft AGL	Visibility	5 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21°C / 16°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	(MTO)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:57 Local	Type of Airspace:	Class C

Page 4 of 6 CHI99LA151

## **Airport Information**

Airport:	COLES COUNTY MEMORIAL MTO	Runway Surface Type:	Asphalt
Airport Elevation:	722 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	11	IFR Approach:	
Runway Length/Width:	6501 ft / 150 ft	VFR Approach/Landing:	Full stop

## 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:	39.469539,-88.359191(est)

Page 5 of 6 CHI99LA151

#### **Administrative Information**

Investigator In Charge (IIC):	Sullivan, Pamela	
Additional Participating Persons:	DAVE SLAYBAUGH; SPRINGFIELD , IL	
Original Publish Date:	June 21, 2000	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46305	

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.

Page 6 of 6 CHI99LA151